





Ch. 2.10

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PULMONARY CONSUMPTION,

BRONCHITIS, ASTHMA, CHRONIC COUGH,

AND VARIOUS OTHER

DISEASES OF THE CHEST,

SUCCESSFULLY TREATED BY

MEDICATED INHALATIONS.

BY

ALFRED BEAUMONT MADDOCK, M.D.

ILLUSTRATED WITH CASES.



TENTH EDITION.

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MDCCCLXI.

NEW WORK BY DR. MADDOCK.

PREPARING FOR PUBLICATION.

ON

THE INFLUENCE OF AIR AND WEATHER

' UPON

LIFE, HEALTH, AND HAPPINESS,

WITH AN EXAMINATION INTO

THE CLIMATES OF VARIOUS PLACES OF RESORT,

It Home and Ibroad.

THIS VOLUME

IS

Dedicated to the Memory

OF THE LATE

HENRY MADDOCK, M.P.,

BARRISTER-AT-LAW,

. (Author of the "Practice of the Court of Chancery," "Chancery Reports," Life of Lord Chancellor Somers," &c., &c.)

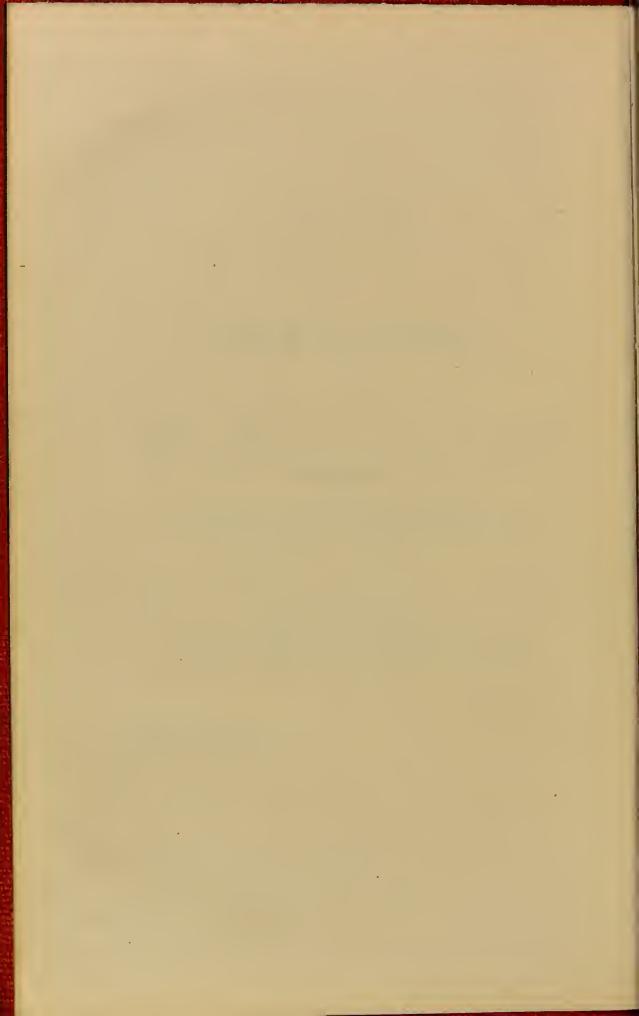
AS A

SLIGHT TRIBUTE OF

REVERENTIAL FEELING AND UNCEASING AFFECTION,

BT

A DEVOTED SON.



PREFACE

TO THE FIRST EDITION.

[Published in the Year 1844.]

The Author of the following pages has devoted, for many years, his particular attention to complaints of the lungs and heart, and the practicability of producing healthy changes on diseased structures of those organs, by the inhalation of vapours, containing the active or curative principles of medicinal substances. During the period referred to, the Author noted down in his Case Book the results of this mode of treatment; and, in the course of his readings from time to time, added, from various sources, the opinions and experience of other practitioners, who adopted a somewhat similar treatment. These scattered facts and observations he has now revised and collected in the present Treatise, with the hope of directing more general attention to this simple and efficient remedial agent, which has been so unaccountably overlooked by a great majority of his professional brethren.

As it is probable that the work, from the interest and importance of the diseases on which it treats, will be perused by many non-medical persons—for anything calculated to throw a ray of light on their treatment, or the hope of arrest-

ing their hitherto unchecked career, must be interesting to the public as well as the profession—it has been the wish of the Writer to show, in as clear and familiar a style as possible, intelligible alike to all classes of readers, the principles upon which the practice of inhalation is founded, as well as the various remedies employed, and the best mode of using them.

It is the Author's opinion, that a work intended for the advancement of any science should be so far professional as to be readable by the professions, and so far popular as to be interesting to the man of general intelligence; and he fully concurs with the late Dr. Currie, "that it were better for medicine, like other branches of natural knowledge, to be brought from its hiding-place, and exhibited in the simplicity of science, and the nakedness of truth." When a medical treatise, like the present, is freed from technicalities in its terminology, a benefit is conferred on society, by enabling a patient to become a critic in his own complaint; and thus, many persons are not only prevented from falling victims to error in the treatment, or placing themselves in improper hands, but are instructed how to take care of their health, and are rendered more observant of their own altered sensations, as indications of approaching disease; and also capable of giving accurate information, whether they consult personally or by letter, as to the seat and signs of disordered functions, and those leading facts which regulate professional opinion-which they could not satisfactorily communicate, without the previous knowledge that such writings impart. More especially has the Author been induced to make the public acquainted with the rationale of Inhalation, from the fact, that a great majority of his professional brethren have

refused, or neglected, to ascertain the truth of the assertions and experience of those practitioners who have adopted this important remedial agent,—and have remained content with denying, when it has been a duty they have owed to themselves and their patients to have examined.

It is not, however, to be expected that the generality of mankind, in the event of inactivity or supineness on the part of their medical advisers, should look on with indifference, and refrain from using their own individual exertions towards promoting the more common employment of a sanatory agent, by which, in some cases, if not universally, a chance may exist of staying the mighty havoc which complaints of the chest make in our domestic circles; and snatching from the tomb some at least of its annual victims.

But while divesting the Treatise, as far as practicable, of professional technicalities, it must be distinctly understood, that it is very far from the intention of the Author to recommend self or domestic treatment. No friend to his species would advise the uninitiated to treat those diseases which have hitherto baffled the skill of the physician. When the varied resources of the medical art have been found unavailing, the best devices of persons, ignorant of the principles and practice of medicine, are only likely to hasten a fatal termination.

The Author hopes, that any inaccuracies of style, or other defects, will be considered by the reader with indulgence; for, in the midst of those active and important duties which daily devolve upon him, he has but little leisure left for literary occupation, but it appeared to him better to attempt to do good—even though it be done in an imperfect manner—than not to do it at all.

In conclusion, the Author claims no merit beyond that of promoting and extending this invaluable means for the direct local application of remedies; and if his humble labours tend to prolong the life, or alleviate the sufferings, of one of his fellow-creatures, he will think them amply repaid.

56, Curzon Street, Hyde Park, W.

PREFACE

By Dr. GREEN,

EDITOR OF THE AMERICAN EDITION.

(ABRIDGED.)

With pleasure we introduce an American Edition of Dr. Maddock's celebrated work on the efficacy of Medicated Inhalations in Diseases of the Chest. We do it, we say, with pleasure, because whatever knowledge can be promulgated that will bear directly against these complaints, and especially against that most dreadful and fatal of them all—Pulmonary Consumption—should be freely and unhesitatingly tendered. In England the work has elicited universal praise, several large editions having been sold almost as soon as they were issued from the press; and it is presumed that the undeniable truths which the volume contains, if republished in this country, will not only meet the approval of all candid and inquiring minds, but also become eminently useful.

Dr. Maddock has had very extended experience, and the successful cases here reported by him—some fifty in number—must present to any unprejudiced mind the most satisfactory evidence of the decided superiority of Inhalation over the ordinary mode of treatment.

Routine practice—aptly called by Dr. Elliotson the "old

jog-trot system "—it must be admitted, is utterly useless in a curative, and, generally speaking, in a palliative point of view, in diseases of the respiratory organs, as evidenced by the Report of the Committee to whom was referred the consideration of Tuberculous Complaints, before the American Medical Association which assembled in May, 1853, in New York. Dr. D. F. Condie, of Pennsylvania, reported that the committee "had considered the subject very attentively, and the more they did so, the more they doubted the generally-received opinions regarding Tuberculosis, both as to its causes and treatment." In the face of these facts can any liberal-minded practitioner hesitate to give Inhalation an impartial trial?

It is not unknown to us that some physicians, having little or no practical knowledge of Inhalation, find a brief mode of avoiding inquiry or explanation, by condemning it in toto; but we are gratified in being enabled to report that numerous practitioners in this city, and throughout the Union, have extensively employed this great remedial agent, and have pronounced it to be a most efficient auxiliary—nay, a sine quâ non—in the treatment of all affections of the thorax.*

^{*} The Editor of the 'New York Medical and Surgical Journal' (Jan. 1, 1856), to whom I am indebted for many pertinent and valuable observations, says: "The profession, almost as a body, now recognises the necessity for a radical change in the old treatment of diseases of the lungs, and we are convinced that the change must be an adoption of the direct application of medicines to the seat of disease, through the instrumentality of medicated inhalations. As an evidence that we do not over-estimate either the extent or the influence of those recent adhesions to our views and practice, we would mention among those who, to our knowledge, have of late prescribed inhalation—Dr. Sayre; Dr. Alex. B. Mott; Professor Horace Green, of the New York Medical College; Dr. Cammanu, and Professor Alonzo Clark, of the College of Physicians and Surgeons of this city; Professor Dixi Crosby, of the Vermont Medical College; and Dr. Bowditch, of Boston.

"These gentlemen all occupy a very high position in our profession, and

Among other celebrated physicians, Dr. Jenner Coxe, of this city, has published an interesting work on Inhalation, in which he gives many instances of its curative influence, not only in the case of others, but in that of himself. "In reference to my own case," Dr. Coxe says, "which was the first in which I employed Inhalation, it may not be amiss to state that, for years, I had given an ample trial to all the remedies which were suggested by many of the most experienced American and French physicians, without being able to effect more than an alleviation of the most distressing symptoms attendant upon a chronic disease of the mucous membrane of the larynx and trachea." After narrating numerous examples of recovery, Dr. Coxe concludes thus:—"I hope that I have now convincingly proved that Medical Inhalation is not only peculiarly applicable, but that it has displayed unequalled remedial powers, in the cure of pulmonary, bronchial, laryngeal, and tracheal diseases."

We might multiply quotations from the experience of distinguished medical men, respecting the happy effects to be derived from Dr. Maddock's mode of treatment; showing that, as a feature in judicious practice in the treatment of diseases of the respiratory organs, it stands pre-eminent; but to do this would be superfluous.

Dr. Maddock states, in which we concur, that, in many

eannot be supposed to act from other than a strong conviction of the value and excellency of the practice. However injudicious may be many of their early experiments, and frequent their failure from the want of that guiding knowledge which practical instruction or long experience alone can give, we cannot but rogard this as the dawning of great and important changes in the practice of medicine."—A. B. M.

of the cases where Inhalation has been unsatisfactory, it has been owing to the imperfect instruments used, and to the administration of improper remedies.

We adopt the inhaling machine successfully used in the practice of Dr. Maddock, and other eminent medical gentlemen who employ inhalation in England. The apparatuses with small mouthpieces, such as are now used in this country, always induce fatigue in the respiratory organs, and are apt to bring on a succession of violent coughings; but Dr. M.'s instrument does not occasion fatigue, or impose the slightest exertion; requiring during inhalation no more effort than does ordinary breathing. Success could not be expected to attend the process with the imperfections of the common inhalers, neither is it to be supposed that an injudicious selection from the various remedies can be more satisfactory.

To close our present remarks, we will observe, in reference to morbid conditions of the lungs and air-tubes, that with the adoption of the method of treatment now under consideration everything is to be anticipated, but without it nothing can reasonably be expected, as past experience has too fully demonstrated.

MEDICATED INHALATIONS

IN

AFFECTIONS OF THE CHEST.

From the earliest ages, Consumption and other diseases to which the lungs and breathing-tubes are subject have engaged the attention and prompted the unremitting study of medical writers of the greatest eminence—many learned disquisitions have been penned upon the pathology and diagnosis of those complaints—but when the subject of treatment has been entered upon the tone has generally been hopeless and desponding.

The utmost variety of opinion has been expressed as to the probable, or rather possible, efficacy of the different remedies which have from time to time been suggested—remedies which, it must be admitted, have hitherto done but little to advance the reputation of the profession, or to lessen the amount of human suffering and mortality.

As evidence of the prevalence and fatality of pulmonary disease, I may mention that the bills of mortality show that, upon an average, 8,000 persons in the metropolis, and about 60,000 in the United Kingdom, annually fall victims to this scourge of our species.

When we recollect the delicate organization of the lungs—that every minute of our existence we inspire and expire upon an average thirty-six times, which movements commence at birth and continue without cessation until death—and when

we remember how the lungs receive blood from the heart, varying in quantity and quality, and how they are operated upon by a changeable atmosphere, impregnated with injurious vapours, and loaded with hurtful particles, we can expeperience no surprise at the universality of pulmonic disease. But, however easily we may be able to account for the prevalence of consumption, the admitted fact that 60,000 persons are computed to die of it annually in Great Britain assuredly demands the serious attention of the faculty.

Bearing in mind these fearful truths, and the impossibility, under the ordinary treatment, of curing, or even staying the progress of, this mighty disease, it may be fairly presumed that any remedial means calculated to avert the fatal termination of this destroyer of our fellow-creatures will be hailed as an invaluable boon; and that individual must indeed be inaccessible to the dictates of humanity who does not embrace every opportunity of directing attention to any circumstance, or mode of practice, which may be calculated to accomplish that important object.

Endued with these feelings, it is with unmingled satisfaction and pleasure I am enabled confidently to assure the public and the profession that there is now a well-grounded hope of recovery for the afflicted, and that consumption is no longer to be considered beyond the reach of the medical art—as the opprobrium artis medicinæ. Science has at length fairly grappled with this inveterate enemy to mankind, and has triumphed. I shall incontrovertibly show, not by theoretical speculations, but by facts, that pulmonary consumption, in certain stages of the disease, is positively curable, and that under the most adverse circumstances it is possible to afford extraordinary alleviation of suffering, by a judicious use of Medicated Inhalations.

But while I confidently assert that consumption may be cured, let it not be supposed that I regard inhalation as a catholicon, possessed of the power of overcoming the disease in every stage, and under all circumstances. I am too well

aware of the danger always more or less attending this malady to advance such a statement, which would be contrary to the results of my experience and inimical to the cause of truth. I fully admit the formidable character of pulmonary disease, and the uselessness, in many instances, of the best-directed efforts to oppose its progress; but, surely, occasional failures cannot be used as an argument against my mode of practice, inasmuch as all remedial means frequently fail in those complaints affecting the liver, stomach, womb, kidneys, and other organs, which are generally considered by the profession as being amenable to proper treatment.

I am well aware that a majority of the profession do not admit the possibility of curing pulmonary consumption, especially after ulceration has commenced; and I feel that it would, indeed, be thought presumption in me to attack a conviction in the public mind, so deeply seated and inveterate, by simply expressing my own ideas, and by narrating facts that have fallen only under my own observation. To combat any error successfully, it requires confirmatory testimony, that cannot possibly be open to the censure of interest. I shall, therefore, quote freely and ipsissimis verbis from the writings of those authors who have contributed the best energies of their minds to the study and investigation of this special class of diseases. Somewhat after the manner of old Burton, these pages are, indeed, fertile of quotations, but this will scarcely be considered an objection, since it gives the essence of many minds instead of one.

The most conclusive evidence of the possibility of a recovery from phthis is derived from necroscopic examinations. Tubercular degenerations, as we all know, may be found in the lungs in three principal states or stages,—in the form of small miliary granulations, in masses of variable size, and as cavities from softening.

. Pathological facts show that recovery may take place in each of these stages. The evidence that they furnish of its

occurrence in the third stage by cicatrization, is the most perfect, that of its occurrence by cretaceous transformation is the most common, and the evidence of its occurrence in the first is the least common,—a circumstance, however, which does not lead us to believe that it is really the less frequent; but, on the contrary, that all trace of the disease is removed in the earliest stage by absorption.

That tubercular matter can be absorbed, we know from the fact that it is often removed in this way, when deposited in glands. Rokitanski believes that miliary tubercles undergo a kind of metamorphosis, which he calls obsolescence, by means of which the tubercle, after it has passed through its condition of crudity, loses its shining appearance, and increases in density, becomes converted into a small hard lump, and then shrinks into a tough amorphous or slightly horny mass—cornification. This forms the basis of a complete destruction or death of the tubercle, and no further metamorphosis can take place.

The chalky and calcareous concretions, which are so often found in the summits of lungs, are invariably, we believe, acknowledged to be the results of the transformation of tubercles. According to Rokitanski, this never occurs in tubercle in its original form, being confined to the dissolving and dissolved blastema; and in connection with this, it is worthy of note, that transformation commences, as softening does, at the centre of tubercles. Dr. Valleix has observed tubercles having a hard calcareous concretion at the centre, round this cretaceous matter, and at the circumference a layer of tubercular matter. Boudet believes that the transformation may take place at all the stages,—grey granulations, crude, or yellow or softened tubercles. Be this as it may, the fact of cures accomplished by this process is established.

So also it is proved that cavities may be healed by cicatrization; by contraction with chalky or calcareous concretion; or by the formation of a thick tough fibro-cellular lining membrane, the cavity remaining persistent.

Nor are these pathological changes unfrequent. Professor J. H. Bennett found concretions and puckerings of the lungs in 28 out of 73 bodies. Rogéc states, that of 100 aged persons who died at the Salpĉtrière, 31 had concretions and other traces of tubercular disease of the lungs. In five of the cases he found cicatrices of cavities which had healed; and he states, that in the course of a single year he had been able to collect ten or twelve incontrovertible examples of the same kind. Nor is this fortunate issue confined of necessity to cases in which the disease has been of very limited extent; for Dr. Bennett has recorded the case of a man, who, at the age of 22, laboured under all the symptoms of deep decline, but recovered, and died at the age of 50 of an affection of the brain. The apices of both lungs contained cretaceous tubercles, and were puckered, and the cicatrix at the summit of the right lung was from a quarter to three-fourths of an inch in breadth, and three inches in length. When we remember the tendency which all cicatrices have to contract, it will be evident that one of this kind must have resulted from a cavity of very considerable size.

Laennec, one of the earliest writers who enter very fully into the curability of consumption, found, on examining the lungs of many persons who had died of other diseases, appearances such as would result from the healing of ulcers or burns on the surface of the body. He remarks:-"After I was convinced of the possibility of cure in the case of ulceration of the lungs, I examined these remains more closely, and came to the conclusion, that in every case they might be considered as cicatrices." After detailing, at considerable length, the peculiarity of these appearances, he observes:-"This fact seems to me to leave no doubt of the nature of these productions, and of the possibility of the healing of ulcers in the lungs. The foregoing observations, I think, prove that tubercles in the lungs are not a necessary and inevitable cause of death, and that cure may take place in two different ways after the formation of an ulcerous excavation; first, by the

cavity becoming lined by a membrane; and secondly, by the obliteration or closing up of the cavity by means of a cicatrix."

Dr. Carswell, late Professor of Morbid Anatomy, at University College, observes—

"The important fact of the curability of the disease has, in our opinion, been satisfactorily established by Lacnnec. All the physical signs of tubercular phthisis have been present—even those which indicate the existence of an excavation—yet the disease has terminated favourably, and its perfect cure has been demonstrated by the presence of a cicatrix in that portion of the lung in which the excavation had formerly existed. Pathological anatomy has, perhaps, never afforded more conclusive evidence in proof of the curability of a disease than it has done in tubercular consumption."—Cyclop. of Pract. Med., Art. Tubercle.

Dr. Swett, one of the physicians of the New York City Hospital, and Professor in the Chair of Medicine in the University Medical College, in his published 'Treatise on Diseases of the Chest,' considers the curability of consumption, and gives his opinion unhesitatingly in the affirmative. He asks the question—

"Is eonsumption a curable disease? The general impression in the medical profession, to its disgrace be it spoken, is, that a patient with phthisis is doomed to death. If those cases only are eonsidered in which the disease is so far advanced in its progress that it is easily distinguished, this opinion, on the whole, is well founded; yet, even under these circumstances, unexpected recoveries take place. I shall never despair of the life of a patient with phthisis when I recollect what I once witnessed in this hospital."

Dr. S. then proceeds to detail the particulars of a case which presented all the symptoms of consumption in its most advanced stage. So marked were the indications of a large cavity in the right lung, that he was accustomed to speak of the case as being of an undoubtedly incurable character.

"On one occasion," he continues, "I found the patient, who had been gradually sinking, in such a state of extreme exhaustion that it seemed to me improper to disturb him. He was bolstered up in

bed, with his head resting on his shoulder, breathing with great difficulty, bathed in perspiration, and with a feeble and rapid pulse. He looked like a dying man. The next day my attendance ceased."

On the doctor's return, at the end of two months, he found this *dying* patient was so far recovered as to be able to walk about, and continued steadily to improve. He then goes on to tell us that—

"during the past fifteen years he has known many persons who had all the symptoms of consumption in advanced stages, yet finally recovered." And again: "For the past fifteen years I have been in the habit of examining the lungs of all my patients, dying of every form of disease, for traces of phthisis that had been cured. I have been astonished at the number of eases which have presented evidence of this favourable result."

Many examples of cicatrisation of the lungs, after tubercles, are recorded in Andral's 'Clinical Medicine' (book iii. p. 382). These cases are more extraordinary than those given by Laennec, and, together with them, put the fact of the healing of tuberculous excavations beyond all question; or, to use the language of Bonet—

"Curatio non est desperanda, etiam jam exorto ulcere."

Thesaurus Medico-Practicus, p. 57.

Such facts surely teach us a lesson of no little importance; they cannot but tell us that despair is unwise, that we may hope even for our consumptive patients; and that hoping we are bound to use all the appliances which our art makes known,—medical, hygienic, climatic,—to bring about what some will call an arrest, what others will designate by the more checring name of recovery, but what, call it as we may, is in numberless instances a priceless boon.

With this weight of testimony, however, in support of the curability of the disease, we look in vain, through the several works from which I have quoted, for one that can point out the means by which that cure can be effected. Most writers give to nature the credit of accomplishing the recovery when it does really occur. But if Consumption be curable by the

operations of nature, in even a single instance after it has reached its worse stage, when the lungs are broken down into cavities, it must surely be within the reach of art to aid nature so far as materially to increase the frequency of such recoveries.

The RATIONALE of inhalation is exceedingly simple, and it will be at once evident to any reader, medical or non-medical, who will give the matter a minute's consideration, that this plan of treatment is based upon strictly scientific and correct principles,—for it requires no professional learning to pereeive that, from the relative position of the stomach and lungs, remedies must necessarily be more effective in diseases of the lungs, when introduced into the whole of the aërial cavity of those organs, than when exhibited through the stomach, where they must undergo great and unknown changes, from the process of digestion, &c., and can only reach the seat of disease by means of the circulation.

There is also another advantage which inhaled medicines have over those given in a solid or fluid form, to which allusion has not yet been made: medicines act with greater power and more speedily when minutely divided, just as the solution of any substance takes place most rapidly after the cohesion of its particles has been overcome. The more completely the cohesion, which holds together the active elements of medieinal substances, is overcome before their administration, the more rapid and salutary are found to be their effects. The daily experience of every physician proves this, and its rationale can easily be understood. Before crude medicines can exert any action upon the system, they must be decomposed in the stomach and their active principles eliminated. Until this separation has taken place, they cannot extend their action beyond this organ. Poisons, even of the most deadly character, have been known to lie in the stomach for hours, and afterwards to be washed out, without having exerted any injury upon the system. Others, again, prove fatal within a few moments of the time they are swallowed. The difference in

these effects springs from the difference in the subtlety of the medicines themselves. Chloride of mercury (calomel) has been taken from the stomach twenty-four hours after it was administered, in a perfectly unchanged state, and might for that reason have been washed and put back again into the bottle. The fumes of mercury, on the contrary, pervade the system almost instantaneously.

These illustrations will serve to explain the difference between erude medicines and medicinal vapours. Medicated vapours are medicines in their most attenuated and delicate form; they are the minutest possible division of solid and fluid substances; they are the essences separated from the crudity, and their subtlety causes them to act with the rapidity of touch. A grain reduced to vapour is more active than a grain given in substance, and will produce more effect upon the system. It follows, therefore, that, as a rule, small doses in a state of vapour will answer the same purpose that large once do in the solid state.

Inhalation, then, in the treatment of consumption and chronic affections of the organs of respiration, is the only rational and proper treatment, not only because it is direct, and conveys the medicines to eure, to the part to be eured, but because it conveys them in the form best adapted to prompt action. It may be laid down as an axiom, that medicines act with increased power in proportion to the divisibility of their particles. Inhalation, therefore, not only saves the system from wholesale drugging, by diminishing the doses of medicines, but it saves the healthy organism from injurious action—by limiting their direct influence to the parts which require their aid.

The practice of administering medicines by inhalation is not only based on rational principles, but is in itself an elegant process. It is *rational*, because it is simple, direct, and natural. It is *elegant*, because it is free from disagreeable taste to the patient, and does not, like medicines given by the stomach, excite disgust or nausea. No man swallows

drugs in the form of "pills," or "mixtures," or "powders," without a strong effort of the will. He tolerates them when he is sick as a disagreeable necessity. Often, indeed, he neglects his disease, until confirmed, through his aversion to take medicines. Inhalation, on the contrary, may be employed by the most delicate and sensitive invalid without exciting one unpleasant feeling. The most powerful medicines can in this manner be conveyed into the system, and all their beneficial effects obtained, without producing the slightest discomfort.

It is to the circumstance of inhaling medicines acting upon the blood and through it on the absorbent system, that we look chiefly for the removal of the tubercular depositions and the final restoration of the lungs to health. I am aware that some physicians speak of inhalation as a "purely local treatment," but such, surely, only manifest their ignorance, not only of the practice of medicine, but also of the physiology of the lungs themselves.

The lungs present an absorbing surface estimated by many physiologists at fifteen hundred square feet, and by none lower than an extent many times exceeding the entire surface of the body. This surface is designed by nature to bring the blood in the most direct manner possible under the purifying influence of the air. Now, that this surface takes up all gaseous substances, whether medicinal or poisonous, contained in the respired air, has been amply proved by every physiologist, and there is no excuse for any physician being ignorant on the subject. For the enlightenment of such as are, I refer them to Professor Carpenter's 'Human Physiology,' Art. 'Inhalation and Absorption through the Lungs.' demonstrating that "the absorption of fluid takes place through the lungs," Dr. Carpenter* passes to the consideration of "volatile matters diffused through the air." Of the absorption of these he cites many instances:

^{*} This distinguished man is personally acquainted with cases in which my treatment has proved successful.

"A familiar example," says he, "is the effect of the inhalation of the vapour of turpentine upon the urinary secretion. It can only be in this manner that those gases act upon the system which have a noxious or poisonous effect when mingled in small quantities in the atmosphere; and it is most astonishing to witness the extraordinary increase in potency which many subjects exhibit when they are brought in relation with the blood in the gaseous form."

After giving many illustrations of the promptness and power of inhaled medicines, he eloses his observations with the following passage:—

"It eannot be doubted," says he, "that miasmata and other morbific agents diffused through the atmosphere are more readily introduced into the system through the pulmonary surface than by any other! And our aim should therefore be directed to the discovery of some counteracting agents, which can be introduced in the same manner. The pulmonary surface affords a most advantageous chance for the introduction of certain medicines that can be raised in vapour, when it is desired to affect the system with them speedily and powerfully!"

The absorption of partieles diffused in the air—their admixture with the blood—and their distribution to all tissues and structures—have been clearly demonstrated by frequent experiments of MM. Magendie, Tiedmann, and Liebig, who have detected the odour of camphor, musk, and other remedics, in the blood of animals which had been eonfined in an atmosphere impregnated with these substances. test is afforded of the iodinc vapour producing general effects on the system, by adding to the urine of patients who have thus inhaled it, a few drops of nitrous acid, with a solution of starch, by which a deep blue precipitate is produced, varying in appearance according to the quantity of iodine which has been employed. I have discovered this precipitate after ten minutes' inhalation, which shows how quickly iodine is absorbed into the system. There cannot, indeed, be a reasonable doubt of the doctrine here avowed by Professor Carpenter, that whenever it is desirable to affect the system speedily and powerfully, the medicine, if it can be rendered

volatile, should be *inhaled*. By availing ourselves of this channel, we are able to overcome the tuberculous condition of the blood, to stay the further formation of tubercles in the lungs, and to promote the absorption and expulsion of those already deposited.

Delpit, in the article "Phthisis Laryngea" in the 'Dictionnaire des Sciences Médicales,' thus concludes:

"S'il est une espèce de phthisio où les fumigations simples ou composées puissent devenir utiles, c'est sans contredit celle du Larynx, plus accessible à ce genre de remèdes, et par eonséquent plus susceptible d'en ressentir l'impression favorable ou funestc. Le phthisique est d'autant plus difficile à traiter, qu'il est devenu susceptible des impressions les plus légères, soit physiques, soit morales; perdant avec la même faeilité le repos du corps et le calme de l'âme, il est dans une anxiété continuelle; il désire des alimens, et eeux-ci qui donnent le dévoiement; il veut sortir, ct l'exercice le fatigue; il demande des remèdes, et il ne peut les avaler; il boit, et la toux le suffoque; il appele la santé de tous ses vœux, et la mort le mine sourdement. En vain le médecin varie chaque jour ses conseils et ses prescriptions, le terme ou l'objet de l'espérance qu'il donne sans la partager; en vain il laisse entrevoir l'influence de la belle saison, le baume restaurant de la végétation nouvelle, de l'air salutaire des champs; en vain il indique un voyage dans un climat plus chaud, ou vante les effets merveilleux d'une eau minérale, et en promet l'infallible succès; le malade est toujours disposé à recevoir toutes les promesses, à se bercer de toutes les illusions, à s'abandonner à tous les projets; mais la belle saison passe ou arrive, la végétation sc ranime ou s'étcint, les feuilles tombent ou poussent; la nature fait éelore les fleurs ou prépare la maturité des fruits, elle dépouille les arbres ou renouvelle leur parure; toutes ees révolutions sont également funestes, et ne servent qu'à marquer le moment où le phthisique descend dans la tombe, occupé de projets et nourri d'illusions."

In the same work, article "Inhalation," by Rullier, are the following remarks, which are important as referring to one of the modes by which we are enabled to account for the beneficial effect produced by the local application of remedies to diseases of the lungs.

"Les vapeurs animales oxhalées des chairs et du sang encore chaudo des animaux, et mélées à l'air que nous respirons, ainsi que les émanations des cuisines et des étables, regardées avec raison comme propres à favoriser le bon état de la nutrition chez les bouchers et les cuisiniers, ou à rétablir l'embonpoint de certains malades; l'humidité de l'air atmosphérique, qui diminue le besoin de la soif, et retarde les funestes effects de la faim prolongée, produisent sans doute une partie de ces effets à l'aide de l'absorption des voies aériennes, devenue alors vraiment congénère de l'absorption cutanée.

"L'absorption de la membrano muqueuse des voies aériennes est justement regardée comme une cause puissante de la communication de celles des maladies contagicuses dont le principe réside dans l'atmosphère. L'histoire des phénomènes de l'asphyxie par la plupart des gaz délétères, tels que l'hydrogéne sulfuré, le plomb des fosses d'aisances, ou l'hydrosulfure d'ammoniaque, ne permet pas de douter que ce soit moins à l'énergie stupéfiante dont jouissent ces agens sur le système nerveux, qu'à l'absorption réelle qui s'en fait, qu'il faut réellement attribuer l'influence délétère qu'ils exercent sur l'économie."

Since the appearance of the above observations several cases of far-advanced pulmonary consumption, asthma, bronchitis, &c., have been reported in the French medical journals, and more especially in the 'Journal Hebdomadaire' and the 'Arch. Gén. de Médecine,' in which complete recovery ensued from the use of medicated inhalations; and this mode of practice is now generally adopted by the most eminent physicians throughout the Continent.

My lamented friend Dr. Paris, late President of the London College of Physicians, who has left to his country the inheritance of a great name and illustrious reputation, makes the following remarks in the last edition of his celebrated work on Pharmacology under the head of "Inhalations:"—

"With respect to this particular form of remedy, it may be observed that, if the power of medicine be so greatly medified by circumstances affecting its solubility, it is fair to infer that the still further diminution of its cohesion may occasion a corresponding influence in its energies; indeed, it would appear that some few substances are entirely inert under any other form. Metallic

mercury affords a good example: although inactive in its fluid form, it is highly active in the form of vapour; it is thus that the workmen employed in gilding, silvering looking-glasses, constructing barometers, &c., experience such dreadful effects, for the metal assumes an elastic form at the ordinary temperature of the atmosphere, as Mr. Faraday has proved by a series of conclusive experiments. The operation of inhalation, moreover, enables us to bring various bodies into immediate contact with organs exposing a great extent of mucous surface, through which innumerable capillaries spread out their ramifications, and to which all remedies in any other state of aggregation are necessarily inaccessible. This observation applies more particularly to the lungs and their air-passages."

Dr. Paris describes the two forms of administration, viz. dry fumes and watery vapours; and, in reference to the form, says:—

"I shall only observe, in this place, that the profession do not attach sufficient importance to it; not only is a certain amount of moisture in the air essential to healthy respiration, but it would appear, when in too dry a state, to act as an irritant to the bronchial tubes. In states of eongestion, nothing is more calculated to soothe their mucous membrane than the inhalation of steam; to which may be added such medicines as appear appropriate to each particular case."

Such evidence from such a source cannot fail to convince the sceptic and encourage the invalid in the use of means, the value of which is acknowledged in these unequivocal terms by one who made the philosophy of therapeutics the study of his lifetime, and whose work from which I quote is universally admitted to be the standard authority on the subject.

It is now an undeniable fact, that the inhalation of pure æther and chloroform so acts upon the sensorium and whole nervous system, as to render the patient insensible to the pain of the severest surgical operation; and this discovery may, as Dr. Scudamore has well observed, be cited as a full answer to those who distrust the effective power of a medicine acting through the medium of the lungs. It will surely no longer be disputed by any, that certain medicines may exert a powerful agency when so administered, and produce effects distinct from those which ensue when they are received into the stomach.

In a treatise published in the year 1817, by Sir Alexander Crichton, M.D., this able physician says, in allusion to the ordinary mode of treatment:—

"That pulmonary consumption cannot be cured by medicines which act through the medium of the stomach, the whole history of our art proves to us. Their efficacy in alleviating for a time particular symptoms, such as cough, febrile heat, and colliquative sweat, &c., is not denied. Their assistance, when combined with a judicious and suitable diet, is admitted; but it seems a strange hope and strange conduct to pretend to cure an ulcer on the lungs, whether scrofulous, or phlegmonous, or of whatever kind it may be, by internal remedies alone, while it is acknowledged that ulcers on other parts of the body require a local application independently of all internal treatment.

"Judicious applications to an ulcer, whether arising from a vice in the constitution or local injuiry, are equally necessary for its speedy healing. In exterior ulcers, arising from constitutional causes, such as a scrofulous disposition, no one trusts to internal remedies alone; but in ulcerated lungs, in which, for various reasons, local applications are more necessary, they are almost totally neglected. How incongruous this is, all analogy demonstrates."

On the influence of inhaled medicines, and the knowledge of the profession in regard to this mode of treatment, the doctor observes:—

"The medicines which can be brought into immediate contact with the diseased parts are both powerful and numerous: but as yet we are in the infancy of this art. Our knowledge of the volatilized substances capable of being inhaled and of doing good in pulmonary complaints is still very limited. The conditions which ought to guide the choice of these which we are acquainted with, and the restrictions which retard their administration, are far from being settled, merely from the want of accumulated experience."

Sir Alexander Crichton, it must be remembered, wrote this sentence some forty years ago, and prior to the adoption of chlorine, iodine, and other important remedies; happily this "want of accumulated experience" is supplied, and the hope may now be reasonably cherished, from the rapid advances which pharmaceutical chemistry has recently made, that pulmonary consumption will shortly be admitted, not by a few individuals, but the whole body of the profession, to be as much under the control of the art of medicine as is any other formidable disease.

Sir D. J. Corrigan, M.D., the learned and respected member of the "Medical Education and Registration Council," &c. &c., observes that he feels justified in coming to the conclusion that "medicated inhalations exert a most powerful influence over diseased action; and that, as it is only in this form we can administer remedies to act locally upon diseased tissues in the lungs, the exhibition of remedies in this manner merits the closest attention and most diligent inquiry."

Medicated Inhalations are now largely employed in America, in which country my work has been republished by Dr. Green, and, as I am informed, with a great amount of success. Among other eminent physicians who have adopted this treatment may be mentioned Dr. Coxe of New York, who, in an excellent treatise on 'Diseases of the Respiratory Organs,' remarks:—

"I have found medicated inhalations peculiarly applicable in many complaints of the larynx, trachea, bronchi, and lungs; and the value and efficacy really belonging to this remedial measure may, to a certain extent, be estimated from the fact, that in every case in which I have employed it, not only was the disease of many years' duration, but the long-continued trial of the various remedies generally recommended, and upon whose curative powers the most experienced of our profession almost solely depend, had proved entirely ineffectual."

Dr. Coxe states that—

"The first ease in which I used inhalations was upon myself, and it may not be amiss to state, that for years I had given a fair and ample trial to all the remedies which were suggested by many of the most experienced American and French physicians, without

being ablo to effect more than an alleviation of some of the most distressing symptoms attendant upon a chronic disease of the larynx. Even this alleviation could only be finally accomplished by abandoning the practice of my profession, and calling into requisition the advantages of sea-voyages, a long residence in warm climates, in conjunction with such other means as were considered appropriate."

Dr. Coxe adds, by regularly pursuing a course of treatment (inhalation), that he succeeded in completely curing himself, and that he is, at the period of his writing, in the enjoyment of excellent health, and enabled to attend to the duties of an active life.

Dr. Coxe relates several cases of asthma, bronchitis, and consumption, which were cured by inhalations; among the latter is included a physician of extensive experience, now practising at New York. Dr. Coxe eoncludes by saying:—

"The fact of the curative powers of medicated inhalations I now consider well established, and those who, labouring under any diseases of the respiratory organs, are generally made to depend upon the uncertain effects of sea-voyages and change of climate, however inconvenient such measures may be, for a probable restoration to health after a long-continued, though most frequently inefficacious, treatment, have certainly a right to require from their medical advisers that the efficacy of medical inhalation should be faithfully and fully tried in their cases."

Dr. Rush of Philadelphia, in his work on 'Diseases of the Chest,' observes, in reference to inhalation, that—

"Too much cannot be said in favour of this simple system of conveying remedies. I have frequently seen patients snatched from the jaws of death by it. Whether all the beneficial effects, that may be justly considered possible to result from the use of the inhaler, either as a preventive or curative agent, will be realised, must be determined by future observation; but it is to be hoped that the general want of success which attends the present mode of treating pulmonic disease, will induce medical men to give a fair and full trial to a remedial measure, which appears so well calculated to effect a great amount of good."

Sir John Forbes, M.D., Physician to Her Majesty's Household, and late editor of the 'British and Foreign Medical Review,' makes the following judicious remarks upon the efficacy of inhalations in asthmatic affections:—

"Wo are disposed to look to this class of remedies with considerable hopes of success. Legitimate reasoning and strong analogy, at least, are in their favour; and it cannot now be denied that a good deal of direct experiment can also be brought to testify in behalf of some of them. The most common, if not the general cause of asthma, is, as we have seen, permanent alteration of the mucous membrane of the bronchi, frequently characterised by obvious signs and symptoms, sometimes only inferred from the morbid sensibility of the part to external influences. Although we know that similar affections of other parts are curable by general means, still we find that, when we are enabled to combine with these applications that act directly upon the seat of the disease, the result is frequently much more speedy and certain. the case in diseases of the external skin, of the stomach and bowels, and in various local affections of the mucous outlets of the body. We are well aware that applications of this kind are frcquently very injurious, in place of being beneficial; but this is an argument against their improper use only. Every physician must have witnessed the extraordinary and instantaneous benefit afforded by local applications to the urethra, the throat, the eye, in cases which had been for weeks or months unrelieved by general treatment. In the dry catarrh [bronchitis] we have a morbid state of the mucous membrane very analogous to some of the affections now alluded to; and although, as in these, the injudicious or improper use of local applications is likely to increase irritation in place of allaying it, it does not certainly seem unreasonable, à priori, to expect that due care in adapting the particular remedy to the individual case might be followed by results equally happy. The history of asthma affords ample proof that the return of the paroxysms is very much influenced by the direct applications made accidentally to the bronchial membrane."

In every stage and form of ASTHMATIC and BRONCHIAL DISEASE inhalation, when properly directed, affords certain and prompt relief, and in the great majority of cases so alters the condition of the mucous membrane, and overcomes the

morbid sensibility of the nerves, as to entirely break up the

disease, even though of many years' duration.

To Sir James Murray, M.D., the profession owe a deep debt of gratitude for the first introduction of inhalations of iodine, as a remedy in tuberculous consumption and other diseases of the lungs and air-passages. Sir James, in his interesting dissertation on this subject, observes:—

"With respect to the inhalation of iodine, if I had not abundant proofs of its value, I would not be the first to make use of it; but I can with safety assert that it will sometimes heal, if early applied; and it will give rest, and repose, and relief, in eases where it is impossible to cure."—Vide 'Treatise on Consumption.'

Dr. Harwood, late physician to the Hastings Dispensary, in his able treatise on 'Diseases of the Throat and Chest,' remarks:—

"Although I am unable to speak from my own observation of the curative effects of inhalations of iodine in consumption, when employed independently of other methods of treatment, I am happy to be able to state, that its eareful use in combination with them has oceasionally been attended with very satisfactory results. Thus, amongst other less decided eases, in instances in which the symptoms and sounds of the ehest, as manifested by the use of the stethoseope and by percussion, have appeared to other physicians, with myself, to prove the existence of tubereles of the lungs, the patients have lost all indication of existing disease. At least I may observe, that during a long, and, at present, uncertain period, a quiescent stato in the diseased structure of the lungs has followed the use of these combined means; and, with the general evidences of restored health, great improvement has also taken place in the sounds of the ehest,—a state which I presume may be regarded as that of recovery. And I have additional satisfaction in being able to add, that the same favourable results have sueeeeded the continued employment of these measures, even when suppuration and other symptoms, as distinctly the result of pulmonary exeavations, eoexistent with tubereles, have been present."

Almost simultaneously with Sir James Murray's treatise, appeared an invaluable work written by the late Sir Charles

Scudamore, M.D., F.R.S., in the year 1829, 'On the Efficacy of Iodine and various Medicines administered by Inhalation in Consumption and certain Morbid States of the Trachea and Bronchial Tubes.' That the results of this mode of treatment were equally successful after the appearance of the work, will be apparent from the subjoined observations published by Sir Charles in the 'Lancet' for 1841-42:—

"It is now fourteen years since I was led to make trial of iodine, in the form of inhalation, as being a medicine highly capable of stimulating the absorbents of the lungs, which are not few, to remove tubercular matter; of inducing a healing process in a cavity when formed; and of correcting the morbid action of the bronchial mueous membrane. Experience has amply justified my recommendation of this treatment, and I have had the happiness of suceeeding in very numerous cases, in which according to all my former experience, with the old methods of practice I must have failed. . . . It has been sometimes called a mere local treatment,—and when it is so, how much deduction would be made from its importance? But even this criticism is not just. The inhalation acts on the whole system, as I have had proof of, by witnessing, even inconveniently, the constitutional effects of iodine; but to this admission let me add, such disagreement has not happened in so large a proportion of instances as one in a hundred. When I deliberately affirm this as a truth, surely the most timid cannot shrink from the remedy. What medicine is there, of any power, which does not occasionally disagree in particular idiosyneracies of constitution?"

Relative to the scepticism which was entertained by some of his contemporaries as to the efficacy of the treatment by inhalation, Sir Charles well remarks:—

"I cannot refrain from remarking that some are so bigoted to their experience and old methods of practice (consecrated by time, but certainly not recommended by success), that they repel the introduction of what is new, especially when the remedy requires much watchfulness of its action in order to insure good results. Great perseverance, also, is necessary; nor can this appear remarkable, if we reflect upon the important and difficult nature of the work to be accomplished,—the removal of tubercular matter from the lungs by means of absorption; the healing of an excavation;

the relief and euro of bronehial disease; and, lastly, a chango to be effected in the system—in the whole mass of the blood. It is true that our best and most anxious efforts may frequently be doomed to meet with pain and disappointment, but the satisfaction of the occasional success with which we may be rewarded will be proportionably gratifying; and in those instances where the inveteracy of the disease will not permit success, we should assure ourselves conscientiously that we have done all in our power to obtain it."

Dr. Wilson has published in the 'Laneet' (vols. i. and ii., 1841-42) several interesting papers on the beneficial effects of inhalations of iodine in pulmonary consumption, and says:—

"I know full well the extreme difficulty that presents itself of eombating the old and confirmed prejudices entertained by the majority of my profession and the public against the curability of eonsumption, and I must admit that medical records but serve to strengthen such conclusions; but an enlightened and liberal profession should be open to conviction, free to embrace facts, and carnest to solicit inquiry. We have seen to what a surprising extent prejudiee has blinded us to the most valuable remedial agents. Many of our best medicines were popular remedies before the medical world would admit them into their vocabulary. Iodine, to a great extent, shared the same fate; and the physician who had the hardihood to recommend the internal use of eartharides was prosecuted, and suffered the penalty of his sagacity—but taught his followers the safety and value of his practice. Doubtless a new system of treatment should be received with due eaution, but divested of all prejudice. If certain results and certain facts are stated, a fair trial of their intrinsic worth should be made, and particularly if they refer to a disease which, to a sad extent, has baffled medical skill. and defied the ingenuity of the greatest talent."

The history of medicine affords abundant proofs of the acrimony, nay, the fury, with which every new doetrine has been impugned and insulted. The same annals will also show that this spirit of intolerance has always been in the ratio of the truths that these doetrines tended to bring into light. The practice of inhalation has no doubt been impeded in its progress by the invectives of oceasional scepticism; but the slurs of the sceptie may be compared, as an intelligent

writer has well observed, to those accidental opaque bodies commonly called "spots on the sun," which frequently flit before its disc, and, intercepting the solar rays, occasion a hibernal chill in the midst of the summer's heat. They are but transient obstacles to the transmission of light, and the bright orb beams with increased refulgence when these dark stigmas disappear. Such will ever be the case with science, and those discoveries which accelerate its inevitable empire on the human understanding. Persecution may be considered as the harbinger of truth, or at any rate, of that investigation which directs us to it. Pythagoras was banished from Athens, Anaxagoras was immured in a dungeon, Democritus was considered a maniac, and Socrates condemned to death. An advanced and honourable old age did not protect Galileo against his barbarous persecutors; Varolius was decried as an infamous and execrable man for his anatomical discoveries; and our immortal Harvey was looked upon as a dangerous madman. Innoculation and vaccination were deemed impious attempts to interfere with the decrees of Providence, and potatoes and tobacco looked upon as infernal importations!

But, perhaps, it is as well there should be these drawbacks, for there is a pleasure great and supporting in the pursuit of a worthy object amid such elements of discouragement and depression. The opposition, too, which a new idea is certain to meet with serves to prevent hasty and ill-considered attempts at innovation, to keep back all but those who are fully convinced of the truth of their doctrines, and earnest and sincere in their advocacy, and at the same time it prepares no inconsiderable portion of the reward of the man who has the courage to differ from established theories and unsound maxims; for he is ultimately both cheered and soothed by the recollection of trampling over past obstacles and difficulties, and his value is more justly estimated when his opinions are eventually received as truths, and are, as they must be, appreciated in direct proportion to the scepticism

and distrust with which they were at first looked upon. Ignorance and scepticism are, indeed, the foils which set off

knowledge and perseverance.

According to my experience and observation, no reasonable doubt can be entertained that tubercles in the lungs are scrofulous deposits: the same view is entertained by many high authorities in this country and abroad. I have examined, post mortem, a great number of scrofulous patients, and have rarely met with an instance in which the lungs were not more or less affected with tubercles. Professors Louis, Graves, and others, have noticed that, if we trace the phenomena of external scrofulous abscesses, we shall be struck with the close analogy they bear in their manner of appearance, their progress, and terminations, to the ulcerations of the lungs in consumption: the same slowness; the same gradual solidification and gradual softening; the similarity of puriform fluid secreted in each; the analogous occurrences of burrowing ulcers and fistulous openings; the close approximation in the form of their parietes; and the difficulty of healing remarked in both; make the resemblance between them extremely striking. Compare scrofulous inflammation of the hip or knee joint with consumptive suppuration of the lungs: have we not the same kind of hectic fever, the same flushings and sweats, the same state of the urine, the same diarrhea, the same state of the appetite, and the same state of emaciation?

With this conviction of the identity of consumption with scrofula, I was induced, at the instigation of the late Sir Charles Scudamore, M.D., to apply (some twenty years ago) to tuberculous lungs, by means of inhalation, that remedy, iodine, which had been found to be most efficacious for the cure of scrofulous enlargements and sores on the surface of the body. The results of this treatment have more than realised my best expectations; and I am well convinced, from the experience of the cases of many hundred patients, who have been thus restored, and who had been previously considered as incurable, that iodine has the decided power of

curing phthisis, by exciting an increased action of the pulmonary vessels, and so augmenting the energies of the absorbents as to bring about solution and absorption of tuberculous deposits. Such an influence this remedy is well known to exercise in dispersing external enlarged scrofulous glands; and as Dr. Cumin truly observes, all that we know of the action of the absorbents in the lungs leads us to believe that they are capable of removing tubercle; and that such an operation, to a certain extent, does really take place, is proved by the changes which that substance undergoes in its progress to the cretaceous transformation. If tuberculous masses of long standing are thus changed, what reason is there to doubt that the soft curdy matter of which they are at first composed is often absorbed and carried back into the circulation, to be converted into some less noxious constituent, or altogether expelled from the system? I have also frequently known iodine to cicatrize excavations in the lungs, co-existing with tubercles, by which process of contraction the cavities become healed, and are prevented from making further progress or causing inconvenience. Many physicians of high standing in the profession, including Drs. Morton (Philadelphia), Thompson, Wilson, Gardner, Burton, Ryan, Baron, Smythe, Davidson, &c., have borne the most ample testimony as to the correctness of these important and consoling facts, and consider, with myself, that iodine, if not a specific in consumption, appears in many cases as very nearly approaching to it.

When iodine is administered by the stomach, it not only reaches the lungs in an uncertain and modified form, but very frequently produces great derangement in the system, causing pain in the eyes, profuse serous discharge from the nostrils, severe frontal headache, and ædematous swelling of the eyelids. This mischief is chiefly induced by the irritating effects of the iodine upon the digestive organs; and I think it should ever be borne in mind by the practitioner, that, in pulmonary and other exhausting diseases, the medicine (more

especially in chronic eases, when they are long continued), as well as the food, should be easily digestible; and when they are not, they should never be employed without the greatest caution and circumspection. All these objections are obviated by the *inhalation* of iodine, by which method the lungs are directly acted upon, while the stomach is not in the slightest degree affected, and is left open for the administration of such nourishing food, tonies, and other means, as are calculated to subdue that general constitutional derangement and debility which always more or less attend diseases of the

respiratory organs.

But, however extensive the application of iodine may be, it must be remembered that it requires, as does every other active remedy, whether administered by deglutition or inhalation, to be materially modified by the peculiarities of individuals, and the eireumstances which may take place during its employment. A heedless perseverance in any medicament, if not judiciously administered, will often ereate more mischief, and produce more suffering, than the disease which has been attempted to be relieved; hence the absurdity of supposing that any nostrum whatsoever can prove a eure for every species of a particular complaint, much less for the variety of forms of disease in general. The symptoms of pulmonary and other affections are too numerous and too dissimilar in their nature, to admit of the use of any universal remedy, for every particular ease is so much modified by age, sex, habit of life, elimate, food, and a variety of other causes, that its treatment eannot be made a matter of prescription; every ease becomes in reality a study in itself, and the skill of the practitioner can only be fully displayed by adapting his treatment to the varying condition and constitution of his patient.

Some medical men, it is true, have reported unfavourably of the inhalation of iodine, but I have generally discovered that the eases in which it had been adopted were of such a character that the disease had already caused complete dis-

organization of the lungs, or that the remedies had not been administered in the proper quantities, and with sufficient cantion and perseverance. It is also very true, as a warm advocate of inhalation observes, "the physician should be regarded as standing in the same relation to this practice that the student does to the principles of medicine. He knows nothing about it from previous education or experience, and requires to be not only taught the principles, but permitted to observe the practice, before he can become in any degree able to judge of its importance, or to employ it with success." The instances, however, in which any trials have been made in this country, are "few and far between;" indeed, it may be asserted, although all the members of the profession must approve of the principles on which the system of inhalation is founded, that scarcely one practitioner in a hundred has employed it as a remedial agent; and this strange apathy has been exhibited, it must be remembered, in the treatment of those diseases declared as incurable under the old routine of practice!

Next in importance to inhalations of Iodine, are those of Chlorine.

In the year 1804, it was noticed that workmen employed in bleaching-manufactories, who were constantly breathing chlorine, enjoyed an almost perfect immunity from disease of the respiratory organs, and also from epidemic fevers, and lived to a great age. It was likewise observed by M. Gannal, an eminent French pharmacien, that, in many instances, persons who had suffered under formidable complaints of the larynx and air-passages, and had afterwards been occupied in these manufactories, were quickly and permanently restored to health.

In consequence of these interesting and important facts, M. Gannal was induced to construct an apparatus from which consumptive, asthmatic, and other patients suffering under complaints of the organs of respiration, might inhale the chlorine in a diluted state. This mode of treatment was

attended with the most marked success, and at length attracted the attention of Dr. Cottereau, the distinguished physician of Paris, who introduced the remedy to the notice of the profession in the year 1824, through the medium of the 'Journal Hebdomadaire,' and in the 'Archiv. Gén. de Médecine.'

In the above medical journals many cases of tubercular consumption of the most inveterate form were indisputably proved by this eminent and accomplished physician to have been perfectly cured by chlorine. After adducing several instances of rapid recovery, in cases where the stethoscopic and general observations were indicative of confirmed consumption, Dr. Cottereau remarks: "These examples incontrovertibly deserve to be placed in the first rank of those which have been collected for some years regarding the efficacy of the inhalation of gaseous chlorine in pulmonary consumption. Indeed the hereditary disposition, the conformation, the nature and succession of the symptoms, all concurred to prove the existence of the disease." In one instance of recovery from extensive pulmonary disease, where the patient died some years afterwards from a totally different complaint (imflammation of the bowels), Dr. Cottereau observes, that, upon making a post-mortem along with Drs. Parmentier and Caignon, the lung which had been diseased was examined, and found to be perfectly healed, and to be composed of a hard, compact, fibrous tissue, of a slate colour, marbled with white and grey, impermeable to air, and not traversed by any subdivision of bronchi. The rest of the lungs was quite free from disease.

This case afforded the most positive evidence of the cure of the pulmonary disease: a cure, the progress of which was traced from day to day, and of which all the perceptible phenomena were noted with the most scrupulous care, and which can no longer be doubted when we find indications of the lesions traced on dissection. "We thus see," Dr. Cottereau adds, "That consumption has existed, and, after

HAVING CONDUCTED THE PATIENT TO THE VERGE OF THE TOMB, HAS BEEN COMBATED WITH SUCCESS."

Many other medical men, at home and abroad, have also deposed to the efficacy of the inhalation of chlorine in diseases affecting the lungs, larynx, trachea, and bronchi, and I have no hesitation in adding my own full and confident testimony that chlorine, used in the method in which I employ it, is capable of removing tuberculous deposits in the incipient stages of consumption, and of curing the latter or more advanced stages, so long as it is evident that a large portion of the lungs is in a sound state, and that the condensation within the excavations and the tubercles has not become completely impervious.

Chlorine, as well as iodine, must be employed with due discretion and judgment: but when used under practised hands, it is perfectly free from the slightest risk, unpleasant sensation, or inconvenience, and its beneficial effects are generally very quickly experienced. I usually add to inhalations of both chlorine and iodine a sedative, which greatly assists their beneficial operation, by subduing the irritation of the mucous membrane of the air-passages, and lessening that general excitement of the system which usually accompanies pulmonary affections.

But, in order to prevent any misconception on the matter, I deem it expedient in this place explicitly to state that, conscious, to quote the language of Horace,

"Alteris sic
Altera poscit opem res, et conjurat amice,"

although I am no advocate for *drenching* the system with powerful and uncertain medicines, I do not *entirely* discard those in general use, many of which, with due caution and circumspection, may be occasionally employed as auxiliaries to inhalation,—regard being paid to the varied symptoms and constitution of the patient,—with the greatest benefit. I say *eaution*, for it is indubitable that many medicines which

are commonly administered in these cases for suppressing coughs, &c., are with difficulty acted on by the stomach, and produce irritation of the lining membrane of that organ, and, as Andral, Larroque, Johnson, and others besides myself have observed, thus do irreparable mischief to the system generally; for the injurious effects of the remedies frequently not only destroy the stomach and all that was previously sound, but actually increase the cough and pectoral suffering they are intended to alleviate. We can only improve nutrition and restore the purity of the blood by restoring the function of the lungs; therefore, all our efforts should be directed to this end. Whatever medicines are given by the stomach can only be regarded as palliatives, therefore the stomach should not be burdened and tortured with any drugs so given, which are not necessary for the temporary relief of some distressing symptom.

Since the publication of the first edition of my treatise on inhalation (in the year 1844), I have had the happiness of curing, or materially relieving, some thousand cases, in the great majority of which other means had failed. Having thus had abundant opportunities of fully testing the value of the treatment, I am now justified in stating, without a

desire to claim for it any miraculous results.—

1st. That medicines, when inhaled, act locally on the lungs and air-passages, and that it is only when so administered that any direct action can be produced.

2ndly. That inhaled medicines act constitutionally as well as locally, and not only so, but more speedily, more powerfully, and with less disturbance of the healthy organism, than when administered in any other manner.

3rdly. That inhalation, as a practice, is based upon scientific principles, and its safety and soundness susceptible of demonstration by facts known and recorded by the highest

authorities in the profession.

4thly. And lastly, that the results of this practice show a

greater proportion of recoveries than was ever before attained in the treatment of these diseases, and are such as not only to warrant, but to demand, its general adoption.

If inhalation has not succeeded in the hands of the prejudiced and inexperienced practitioner—for it is a law of nature that whatever is greatly valuable in its use must be proportionately mischievous in its abuse—the failure must not, in common justice, be attributed to the inefficiency of the system, but to the right causes—to inexperience, to a want of knowledge of, or perseverance in, this modus medendi, and an absence of discrimination and skill in the selection of proper cases, and to an incorrect adaptation of the remedies employed to the existing condition of the system and stage of the disease. In almost every instance that has come under my observation of the failure of the practice, it has arisen from either of these circumstances.

It is under all circumstances a disagreeable and invidious thing for a man to speak of himself, but I may be permitted to suggest that much of my own success may have resulted from a constant study and treatment of these particular dis-The division of labour and attention in the treatment of the various diseases to which humanity is liable has always been regarded as highly advantageous to the public and essential to the advancement of medical science; for we are informed by Herodotus that in ancient Egypt a special practitioner was employed for almost every complaint; at which we cannot be surprised when we recollect the multiplicity of diseases which usually occupy and bewilder the mind of the practitioner, furnishing by far too wide a field ever to be satisfactorily occupied by any individual, whatever may be his talents or attainments. Besides which, the anxiety displayed by those who have successfully practised inhalation, and the particular care and perseverance in conducting the process, and duly watching and regulating its effects, will frequently cause it to succeed, when it would fail under less careful management.

I rejoice for the sake of suffering humanity that of late years I have gained the approbation of many of the most eminent members of my profession (some having consulted me in their own individual cases), from whom I formerly met with a share of that opposition which almost every new invention or mode of treatment, however valuable, has been fated to encounter; and I cannot but feel extremely gratified to find that the opinions I have so long held upon the merits of inhalation should at length be more fully supported by my medical brethren, and that the spirit which of old incited bigotry to the persecution of philosophy is rapidly declining.

Earnestly do I trust that my persevering exertions may lead to a general adoption of Medicated Inhalation—the benefits of which are incontestable—familiar to all who have fairly employed it—and well recognised by patients themselves—and thus remove the reproach now attached to the physician, that pulmonary diseases, which, generally speaking, are so slow in their progress, and preceding whose advent there are such direct indications, should, in so many cases, claim the character of hopelessness. Indeed, I cannot believe that any influence, or combination of influences, can long prevent its universal employment, for it is the only known treatment which can be regarded by the profession as a scientific effort to arrest or overcome pulmonary diseases, and the only one to which the invalid can reasonably look with hope in the hour of affliction.

In conclusion I must explain that

THE METHOD OF INHALING

is exceedingly simple; indeed, nothing can be more so. The patient is provided with a small portable and inexpensive apparatus, called an "Inhaler," into which is poured a certain quantity of warm water. The remedies are then added to and mixed with the fluid, and the medicated vapour is inhaled through a tube of large diameter.

In consequence of the importance now attached to pneumatic remedies, many ingenious machines have been proposed to convey them to the respiratory organs; but the well-founded objection which has been generally entertained to their employment, consists in the exertion experienced by enfeebled patients, in inhaling through a very small tube by the continued effort of suction. The instrument which I employ does not necessitate the slightest labour or fatigue, and may be used by the most enfeebled patients, no more effort being required than in ordinary breathing. While using the inhaler, it may be placed upon the table or the couch, and raised to the required height on a book, or in any other way that may be found most convenient.

The temperature of the fluid with which the remedies are mixed should be regulated, according to the nature and stage of the disease, with care and judgment, and should vary from 80° to 140° Fahr. When the patient is occupied out of doors, or in any way exposed to the vicissitudes of the weather, the heat of the fluid should not exceed, in any instance, 120°, the vapour of which when inhaled will not be above the *natural* heat of the surfaces to which it is applied.

It has been ascertained that atmospheric air at 57 degrees of temperature, when combined, in its passage through the inhaler, with the vapour arising from

Water, at 100 degrees, afforded an inhalation of 79 degrees.

do.	110	,,	do.	84	,,
do.	120	,,	do.	88	,,
do.	130	, ,	do.	93	,,
do.	140		do.	99	, ,
do.	150		do.	104	

In acute, or sub-acute diseases, when the symptoms are urgent, it may be necessary that inhalations should be used every four or five hours; but in ordinary cases I usually recommend them to be employed once or twice a day.

It is necessary to instruct patients commencing the treat-

ment the proper times for inhaling. for otherwise they are often tempted by the soothing and delightful sensations produced upon the irritated or painful chest (which, indeed, cannot be imagined by those who have not felt them), to have recourse to it too often; sometimes, indeed, they cannot easily be persuaded to lay it aside when no longer necessary.

With the hope of having convinced the reader of its RATIONALITY, PHILOSOPHY, and ORTHODOXY, I shall now proceed to demonstrate the

PRACTICAL RESULTS OF THE TREATMENT BY MEDICATED INHALATIONS.

In the practice of medicine, a few incontrovertible facts, which are the only basis of accurate knowledge, are worth a thousand theories or conjectures; the latter, when unsupported by evidence, are found to be but of little avail in the day of trial. Truly has Cieero remarked—Opinionum commenta delet dies, natura judicia confirmat—" speculative opinions may pass away, whilst inferences drawn from nature and truth remain permanently on record." The following eases have therefore been extracted from the author's minute-book, as positive testimony of the efficacy of medicated inhalation in the treatment of diseases of the respiratory organs.

I might have adduced a vast number of other conclusive proofs of the success of this treatment, but I have a great aversion to a parade of cases, and have therefore chiefly confined myself to the narration of those instances of recovery, which have already appeared in my former treatises on this subject, and which have been tested by the lapse of time.

Case I. Consumption.—A gentleman requested me to see his son on May 2nd, 1836. The boy was about thirteen years of age, of a fair complexion, and serofulous diathesis.

He had suffered for some months from constant pain, and a feeling of restraint over the chest; palpitations; distressing cough, attended with copious expectoration of puriform matter, occasionally tinged with blood; disrelish for food: great debility; night perspirations; breathing 30; animal heat 97° (ascertained by the bulb of a properly constructed thermometer being placed under the tongue); the pulse usually beyond 100. These symptoms, which had been treated in a manner calculated to exhaust his general power —as by low diet, leeches, blisters, expectorants, &e.—appearing to become rather aggravated than relieved, my advice was sought. The complaint, it appeared, originated with spitting of blood, which occurred to the amount of about three ounces, and continued in smaller quantities for a few days, and then ceased altogether. On examining the chest by the stethoscope, and by pereussion, I detected wellmarked pectoriloguism, and dulness at the right collar-bone, with a gurgling noise and a cavernous ring on coughing, extending downwards to the fourth rib; at the left side the respiration was imperfect, and percussion elicited a dull sound over the elavicular and sub-clavicular region, and posteriorly on the opposite part of the same side. The heart gave no abnornal indications, though its motions were accelerated and irregular. The former medical attendant pronounced the ehild to have tubercles, and that the ulcerative process had eommenced, and eonsidered his recovery as hopeless. I coincided with this gentleman in his diagnosis, but not in his prognosis, or treatment. I directed that the patient should inhale chlorine and belladonna at a temperature of 120°, and take a mixture composed of sulphate of quinine and steel, with light and nutritious diet. This plan was attentively followed up, and with such success, that, in twelve days, the respiration was more natural, the cough much less troublesome, the appearance of the sputum greatly improved, and the night perspirations lessened. In another twelve days the results were still more satisfactory: the

circulation became fuller and firmer, the surface more florid, the spirits improved, and the severity of the cough and local symptoms were so much relieved by the influence of the inhalations that my patient was enabled to sit up several hours in an arm-chair, without experiencing fatigue or inconvenience; in fourteen weeks from the date of my first seeing him, his health was quite re-established, and he has had no

relapse up to the present time.

REMARKS.—In this interesting case it will be seen that the chief remedy consisted in the inhalation of chlorine, which is an elementary gaseous body, and was discovered by the illustrious Scheele in 1774, who, perhaps, pointed out more new and valuable substances than any chemist in ancient or modern times. Scheele named it diphlogisticated marine acid: this term, however, is incorrect; but if we substitute hydrogen for phlogiston, as many of our modern chemists have done, the views of the discoverer will be perfectly correct and intelligible; for it is now well known that when hydrogen is abstracted from marine (hydrochloric) acid, chlorine is obtained; and, on the contrary, when hydrogen is combined with chlorine, marine acid is produced. Shortly after the discovery of this gas Sir Humphry Davy instituted an examination of it, and on account of its green colour gave it the name of chlorine (from χλωρος), by which it has been known to the present time.

Chlorine is absorbed and dissolved by water, and when that fluid has been boiled it will take up twice its bulk of the gas at a common temperature and pressure. The aqueous solution has the taste and smell of the gas itself, and is the preparation I usually employ, taking care that the chlorine is extremely pure, of uniform strength, of one and a half volume of chilorine in solution, and carefully preserved from the action of the sun, which quickly decomposes it.

Besides the local applications of chlorine to the immediate seat of disease, which were so successfully adopted, it will be remarked that those remedies which were calculated to restore strength and vigour to the system (which had been so lowered by bleedings and abstinence), and to improve the general tone of the constitution, were simultaneously employed.

I may here remark that I believe the foundation of consumption is oftentimes laid by the too great abstraction of blood. It is no uncommon thing to meet with young people who have been bled, purged, and salivated, for some imaginary inflammatory affection, to the utter destruction of the general powers of the system, and who, after a life of prolonged misery and suffering, have eventually sunk under tuberculous disease. Even in inflammatory cases, it is, in my humble opinion. a great mistake to suppose that it is necessary to take such large quantities of blood, or to bleed to such an extent as to occasion syncope, in order to check disease. Every day's experience has shown me the evil results of this "bold" line of practice. With respect to the employment of venesection in phthisical cases, I agree with Laennec, who observes, "Bleeding can neither prevent the formation of tubercles, nor cure them when formed. It ought never to be employed in the treatment of consumption, except to remove inflammation, or active determinations of blood, with which disease may be complicated. Beyond this, its operation can only tend to a useless loss of strength." The great object should be, while endeavouring to correct the local morbid action, not to reduce the strength by these or other excessive drains upon the system, but to augment the constitutional power, and overcome nervous irritability by the judicious administration of tonics, and the allowance of generous diet, with a moderate quantity of good beer or wine. It is only by such treatment, aided by quietude, proper clothing, and pure air, that the general health is to be improved, the absorption of tubercles promoted, and the tendency to fresh depositions counteracted -hoc opus, hic labor.

Relative to tonics it is necessary to add that their beneficial effects depend upon their mode of administration, and they

ought not to be given as long as the pulse is strongly agitated, and, at the same time, strained and hard; the eough very frequent, short, and dry; and the respiration uncommonly aecelerated and short; as long, indeed, as there exists an inflammatory state of the lnngs; the alimentary eanal should also be free from irritation and irregular or disordered seeretions. If these points be not attended to, their employment will tend rather to decrease than augment the general power. The selection of tonies, too, should be regulated by the character of the debility and the condition of the patient; of this important class of remedies I have generally found the preparations of steel and bark produce the most good in persons of feeble power, and of a scrofulous or eonsumptive habit. The use of stimulants requires the same eaution as that of tonies, and must be greatly guided by the previous habits of patients; they are especially necessary to those persons who have been habitually accustomed to their use. I have frequently observed irreparable mischief occasioned by their being suddenly and incautiously withdrawn, and have found many ehronie and pulmonary diseases yield much more readily when they were carefully given.

Case II. Consumption.—A young lady about twenty years of age, of delieate aspect and lymphatic temperament, eonsulted me July 4th, 1838, in consequence of a very severe cough, attended with acute pains in the ehest, from which she had suffered for several weeks. She had been treated by the usual remedies, but had obtained no further benefit than a mitigation of the symptoms. She was pallid, with occasional hectic flushes; much depressed in spirits; the circulation quick, but very feeble; the cough incessant, and attended with purulent expectoration; appetite indifferent; palpitations; catamenia irregular; bowels costive; nocturnal perspirations; inspirations 32 in a minute; animal heat 99°; very perceptible dulness on percussion at the right infracelavicular and mammary regions, and pectoriloquism at the

apex of the lung; the left side was very sonorous, with puerile respiration, and some fine mucous and sibilant râles: the action of the heart, when quickened, was accompanied by a slight bruit de soufflet, which disappeared so soon as that organ became quiet. I directed that the patient should be drycupped over the chest; and prescribed an inhalation of iodine and conium at a temperature of 120°, iodine liniment, with a saline aperient mixture, and a soothing pill, composed of hydrochlorate of morphine, at bed-time; subsequently, in consequence of her exsanguined appearance, small doses of steel and quinine, with a good, nutritious, but plain diet. Treatment on this principle was continued for ten weeks, during which period an occasional change was made in the tonic remedy, and in the quantity and frequency of the inhalations. The dry-cupping—which was had recourse to three times—materially relieved the thoracic pains; the cough and local morbid action were overcome by the influence of the inhalations; and the general health was materially improved by a perseverance in the tonics. The progress was steady and satisfactory; uterine action became perfectly re-established; and, in eighty days from the commencement of my treatment, all the symptoms were removed, and her usual state of health restored.

Case III. Consumption.—A gentleman, aged thirty-five, a solicitor, of feeble power and intemperate habits, consulted me, Sept. 2nd, 1839, and stated that he had, three years previously, an attack of pulmonary inflammation, with cough and spitting of blood, for which venesection, cupping, and mercurials had been prescribed. Since that time a constant irritating cough, attended with expectoration, had continued, and within the last month so much increased as to confine him to his bedroom. A physician of some note had to this date attended him, and pronounced the case to be a hopeless one.

When I first saw the patient he was pallid; much distressed, with an anxious look; suffered from a constant

violent eough; and expectorated about a pint of purulent matter in the course of the day—presenting all the qualities of phthisical sputa; heetic fever prevailed to an extreme degree, attended with great emaciation and profuse night perspirations; pulse, 100; inspirations, 28; animal heat, 110°; tongue much furred; diarrhœa; had lost a brother from consumption. Peetoriloquism, eavernous respiration, and a gurgling râle in the right sub-elavicular region and in the axilla, gave eonclusive evidence of the existence of ulceration in the superior lobe of the lung of that side; and dulness on percussion at the left side denoted the presence of tubercles in the left lung: the heart beat regularly, and with a natural sound, only with too great frequency. A chalk mixture, with the addition of eatechu, was prescribed, and inhalations of chlorine and belladonna at 110° temperature; and subsequently, when the tongue became clean, and the secretions regular, a mixture composed of quinine and infusion of roses, with exeess of acid, and a little solution of the hydrochlorate of morphine; nutritious and generous diet, with a small quantity of the stimulus he had been accustomed He soon experienced the beneficial effects of this mode of treatment; for, in three weeks, the eough and night perspirations had become much diminished, and the expectoration was slight and free; the excessive purgation had eeased; strength improved; and the symptoms generally so much mitigated, that he was enabled to reach his sitting-room. At the end of eight weeks more the eough was very slight, and of no ineonvenience; the sputum very trifling, and consisting of mucus only; there were no longer night-sweats or indications of fever; and he had gained both flesh and strength, and, by wearing a respirator, could take out-of-door exercise. The patient experienced two or three slight relapses from sudden changes of temperature and derangement of the stomach and bowels; but got perfectly well in the course of fourteen weeks from the commencement of my treatment,

during which time the above remedies were steadily persevered in, with some slight modifications.

The gentleman has since paid more attention to his general health, by preserving habits of regularity and temperance; by which he has maintained a proper degree of constitutional power, and has not at the present time the slightest trace of pulmonary disease.

Remarks.—One of the first symptoms in this case was spitting of blood (hæmoptysis), which is too often the harbinger of much and, if neglected, irreparable evil; hence the absolute importance that the least token of its presence should be promptly and effectually met. The common plan of bleeding, as was here practised, I believe to be, generally speaking, injudicious and dangerous—not, perhaps, in its immediate, but in its ultimate effects. When we find the pulmonary circulation become embarrassed during convalescence from acute disease, whilst all the other functions have re-acquired their healthy characters, I am convinced that the occurrence of this symptom is not so much to be attributed to the disease itself as to the treatment. These repeated bloodlettings not only diminish the mass of blood in circulation, but also alter its constitution; for, as Majendie and other physiologists have observed, aqueous drinks absorbed by the veins, being the sole means wherewith the patient is allowed to replace the blood he has lost, it follows that the fluid loses its proper share of viscidity and coagulability, and acquires, proportionably, a tendency The deteriorated blood which is thus extrato extravasation. vasated in the labyrinth-like canals, coagulates, becomes solid, and produces pulmonary disease, similar to that which I have just described.

This case very satisfactorily shows that a cure of consumption may be effected even in the most advanced stages, and that, too, under the most unfavourable circumstances, for here the patient's constitution (naturally weak) was much broken down by intemperance. It bears out the assertion of the

great Laennec, "that the cure of consumption, when the lungs are not completely disorganized, ought not to be looked upon as at all impossible, in reference to either the nature of the disease, or of the organ affected."

CASE IV. CONSUMPTION.—A young man, a groom of delicate constitution, who was placed under my care, March 27th, 1835, related that about a year ago he caught cold, by sitting in a crowded theatre with damp clothes on, which was followed by severe cough, with pains at the chest and head. The medical gentleman who attended the case bled him to faintness; which treatment it seemed rather aggravated than relieved the symptoms. The lancet was, however, again employed, and the like results ensued; subsequently, he was twice blistered. After this treatment he slowly rallied, but had ever since been constantly troubled with a hacking cough, and he had gradually lost flesh. At the time of his application to me he was so debilitated as to be incapable of undergoing the least bodily exertion: complained of severe palpitations; difficulty of breathing; profuse night perspirations; constant cough, accompanied with an expectoration, in which were discovered, by the aid of the microscope, distinct portions of globular, ragged, tuberculous matter. The countenance was anxious; the cheeks attenuated, and patched with a hectic flush; pulse varying from 100 to 110; total loss of appetite; animal heat, 100°; respiration, 30. Auscultation and percussion gave a cavernous rhoncus between the fourth rib and the right clavicle, with a metallie ringing, and pectoriloquy; at the left side there was dulness at the apex of the superior lobe; and there was an unusually deep depression under both clavicles, formed by the sinking in of the walls of the chest. The treatment consisted of inhalations composed of chlorine and belladonna, with occasional dry-cupping, sustaining diet, and febrifuges; and subsequently, when the tongue became clean, and the feverish symptoms were abated, steel and quinine tonics. By these means the more urgent symptoms were speedily relieved; and,

in three months from the commencement of my treatment, natural sounds were the result of stethoscopic examination, and he was sufficiently recovered to undertake a journey to Margate, where he remained for six weeks, and had the advantage of baths at the Sea-Bathing Infirmary. He returned quite well, and re-entered the service of his former master.

Remarks.—This case, while illustrating the remedial virtues of chlorine, also shows the pernicious effects of the abominable system of over-depletion. The symptoms which at first characterized this young man's illness evidently denoted it to be influenza, a complaint well known to be unaccompanied by inflammatory action; and hence the use of the lancet was both uncalled for and highly reprehensible. To bleed in influenza, more especially in old and debilitated subjects, is, I firmly believe, in most instances, to kill. The blood is, as Harvey describes it, the "primum vivens," and "ultimum moriens,"—the life of every part depending upon it. All the phenomena of life tend to prove this. Increase the circulation to the acme compatible with health, and you increase animal power; diminish it, and you diminish animal power; abstract the whole of the blood, and you destroy life.

Recollecting, then, the loss of blood and sensibility produced by the withdrawal of this life-dispensing stream, the practitioner cannot be too cautious in prostrating the system by this dangerous plan of treatment; for by it, as I have too often witnessed, the most painful nervous irritability is produced, which counteracts the very end in view (more especially in consumption), by relaxing that which was already, most probably, too relaxed, and rendering the constitution more delicate, and more incapable of contending with the trying vicissitudes of this changeable climate, and frequently depriving remedial measures of all their efficacy. Local bleeding, by means of small relays of leeches, may be sometimes employed with great advantage in chronic inflammation; but in cases of extreme debility, from long-continued

disease, I have seen even that small loss of blood attended with bad consequences.

Much of the success which has attended my treatment of consumptive cases is to be attributed to having avoided depletion, debilitating medicines, or any measures calculated to

impair the vital principle or power.

Case V. Consumption.—A young man, a publican, aged twenty-seven, of naturally good constitution, but much broken down by intemperance, consulted me, November 2nd, 1836. It appeared that he had suffered for the last nine months from cough, shortness of breath, and pains at the chest; and that, having caught a severe cold by exposure to the night air, the cough had, within the last few days, much increased, and caused him suddenly to bring up half a pint of blood. Being alarmed at this new symptom, he sought my advice. Although complaining for so long a period, he had not placed himself under medical treatment, but had resorted to those injurious nostrums with which our newspapers abound. He was now much wasted in flesh; very pallid, with occasional hectic flushes; the countenance anxious, with a peculiar wild expression of the eye; pulse 100; animal heat, 103°; breathing short and painful; night perspirations; copious expectoration of purulent matter, streaked with blood; the sound, on percussion, very dull on the upper part of the left side; pectoriloquism at the apex of the right lung, with a cavernous sound, demonstrating the existence of an ulcer; and, from the second rib downwards, a crepitating rhoncus was perceptible. I prescribed inhalations of iodine and belladonna; a vesicating liniment to the chest; and a mixture composed of gallic acid and Battley's sedative solution of opium. Under this treatment, the difficulty of breathing and cough were relieved, and the spitting of blood quite removed. A combination of steel with quinine was now administered, in conjunction with the inhalations; and, at the end of five weeks from the commencement of the treatment, the patient had so much improved that he declared

himself to be quite well, and was unwilling to undergo further treatment; but the stethoscopic signs did not correspond with his views, and I warned him, that, although the cure was progressing, it was not established. Shortly after this he removed from the neighbourhood, and I lost sight of him until August, 1838, when I received a message from him, earnestly requesting to see me, at a distant part of the metropolis. I found him reduced to a mere shadow, in great poverty, in the last stage of pulmonary disease, and evidently sinking fast. It appeared that, upon his former partial restoration, he had pursued a course of dissipation, which had completely destroyed his already impaired constitution, and he had now been confined to his bed for five weeks. Although I could hold out no hope of recovery, I considered it my duty to alleviate as much as possible his painful physical sufferings; and this object (which no degree or severity of disease can justify the practitioner in relaxing his endeayours to effect) was more fully accomplished by sedative inhalations than by any other palliatives I have ever used myself, or seen employed by others.

Remarks.—I have notes of several incurable cases of pulmonary consumption (for there are, as a matter of course, periods of disease in which every effort of the remedial art must be equally unavailing and unsuccessful), in which the powers of inhalation, in mitigating the symptoms, have been most remarkably displayed. Putting aside, for the moment, the curative effects of inhalation, the incontrovertible fact of its being with certainty capable of lessening the amount of human suffering, must alone be considered sufficient as demanding the most serious attention, and deserving a full and fair trial from the profession.

It is common for poets and novelists to describe Consumption as a disease of little suffering. They paint the victim of it as slowly fading away, placid in mind, without pain of body, and in the fullest and keenest enjoyment of every sense and faculty; like a withering flower gliding

gently down to the grave, diffusing around her as she fades an atmosphere of increasing sweetness. But, alas! poetry (as a contemporary rightly remarks) is not true to life here. There are few diseases more to be dreaded for the sufferings they occasion. In its commencement Consumption is stealthy. It comes on without any warning of its approach, and is generally firmly seated before it is detected at all. Thus far the descriptions of fancy are correct, but afterwards comes a train of complicated miseries which try even the strongest fortitude.

And there is nothing to console the consumptive in the usual treatment of this disease. Remedy after remedy fails to afford even relief. Change of climate only increases his hardship, and in too many instances hastens the fatal issue. The past presents a bleak and dreary prospect, and the experience of the present—if we except the bright promise

of inhalation—no hope for the future.

Such is the stern reality of this terrible disease, divested of all fancy. It presents a concentration of bodily and mental suffering to which there is scarce a parallel in the sad catalogue of ills to which our flesh is heir.

Case VI. Bronchitis.—A gentleman, resident in Yorkshire, came up to town for the purpose of consulting me. He was reduced in strength and appearance, and had suffered for a considerable period from cough, attended with great spasmodic difficulty of breathing, which previous treatment had failed in correcting. A stethoscopic examination revealed chronic inflammation of the mucous membrane of the bronchi. The patient immediately commenced antispasmodic and sedative inhalations, and was sufficiently recovered in ten days to return home, and he was very shortly afterwards quite cured. About four months subsequent to this I was much gratified by receiving the following note:—"I have the pleasure of introducing to you the bearer, a friend and neighbour of mine, whom I have recommended to consult you. With regard to myself, I have already intimated that

I am in good health. I have no cough, nor do I expectorate, and I breathe with the wonted ease of youth. In short, all bronchial irritation has eeased; which I solely attribute, under the blessing of God, to having followed your inhaling treatment."

CASE VII. CONSUMPTION.—A married lady from Worcestershire, aged thirty-six, of delicate appearance and scrofulous habit of body, placed herself under my care, by the advice of a medical friend, from whom she had derived little or no benefit. She was greatly emaciated, and complained of much pain and tightness at the ehest, with a distressing cough, accompanied with expectoration of purulent matter, oceasionally tinged with blood; animal heat 100°; respiration 30; pulse 120; hectic flushes; night perspirations; and stethoscopie signs of a cavity in the superior lobe of the left lung. The cough and other symptoms supervened after an attack of influenza. The treatment comprised inhalations of bromine (a preparation of iodine), nitro-muriatic lotions to the chest, with the internal exhibition of febrifuges, followed up by the ol: jecin: aselli. The lady remained under my treatment for five weeks, and then returned home, both looking and feeling an altered person. She has ever since been quite free from the slightest symptom of pulmonary disease, and her general health has been good.

Case VIII. Chronic Cough, simulating Consumption.—A young gentleman, aged twenty, an University student, of pallid and melancholy conntenance, and nervous temperament, consulted me for a dry hacking cough, attended with difficulty of breathing on the slightest exertion, derangement of the stomach, and palpitations of the heart; which symptoms had existed, more or less, for two years. He was much emaciated and depressed in mind; his memory and mental faculties were greatly impaired; indeed, he was one of the most pitiable objects I ever beheld. It was believed that he was labouring under pulmonary disease, but the stethoscopic signs did not justify that opinion.

The hidden source of all the disturbance of the health I soon discovered to arise from youthful imprudence—from *moral*, not natural causes. The cough, and increased action of the heart, were quickly repressed in a most remarkable manner by sedative inhalations, and his general health was perfectly restored by the abandonment of pernicious habits, the aid of vegetable and mineral tonics, change of air, and horse exercise.

Remarks.—Cases of this painful nature are too frequently presented to my notice. Mysterious in their nature, delicate in their manifestations, and secret in their causes, they too generally escape the observation, or elude the inquiry, of the practitioner; and, in truth, it may be affirmed, as I have elsewhere remarked (on Mental and Nervous Disorders chap, vii.), that too little importance, and far too small an amount of investigation, have been bestowed upon these most grievous and depressing maladies. By the unaccountable neglect which this interesting branch of medical science has experienced at the hands of those who, from previous education, physiological knowledge, and social and moral opportunity, were obviously most fitted for its elucidation, it has been, as it were, forced under the protection of shameless and extortionate empirics, who, from the peculiar delicacy and secrecy under which such subjects have been shrouded, have been enabled to amass wealth, from the threefold miserable victims of debility, ignorance, and rapacity.

In relation to this class of complaints the language of Dr. James Johnson is very explicit: he observes—"that the salutary boundaries of indulgence of even virtuous love are so very unconsciously overstepped, as to occasion a range of moral and physical evil in the human race that would startle the most stoical mind, were that range faithfully and accurately delineated: 'De tantillâ lætitiâ, quanta tristitia; post tantam voluptatem quam gravis miseria!'" (Bern. C. 3. Med.) The investigation cannot be publicly conducted, but it may be privately prosecuted by the medical philosopher;

and though a path but little explored, it will be found to lead, as Dr. Johnson remarks, to "most important conclusions in the development and treatment of many obscure and anomalous diseases."

I may here incidentally observe that physical and moral health are more elosely connected than is sometimes supposed. Physical science therefore, revealing to us, as it does, a knowledge of ourselves, should become a part, and a most important part, of education; and this knowledge will effect, as a great pathologist has remarked, a greater improvement in the morals of mankind than all the sermons that ever have been, or ever will be, preached. Physiological ignorance is the most abundant source of our sufferings. Any person accustomed to the sick, must have heard them deplore their ignorance of the necessary consequences of these practices by which their bodily or mental health has been destroyed; and when men shall be deeply convinced that the eternal laws of nature have connected pain and deerepitude with one mode of life, and health and vigour with another, they will avoid the former and adhere to the latter. And as actions are named immoral from their effects, selflove and morality are so far perfectly the same. Nor is this sort of morality likely to terminate in itself; for the acting with consideration and upon principle will extend from the selfish to the social actions, and regulate the whole conduct of life. At present there is beginning to appear in physiology and pathology something like the simplicity and eertainty of truth; and in proportion as the laws of animal nature come to be ascertained, the study of them will be gradually esteemed more worthy of general attention, and it will finally prove one of the most popular, as well as the most curious and interesting, branches of philosophy.

CASE IX. CHRONIC COUGH.—A lady of distinguished title, residing near Southampton, consulted me respecting her daughter, aged about nineteen, who had suffered for many months from a constant irritation in the throat, attended

with cough and occasional difficulty of breathing. As the young lady was of a naturally delicate constitution, her parent feared (and not without good foundation) that the complaint, if not speedily overcome, might degenerate into consumption. Many eminent provincial and metropolitan physicians had been fruitlessly consulted.

In sixteen days all the above symptoms were overcome by inhalations, and the patient has remained ever since quite

well.

Case X. Ulceration of the Tonsils and Uvula.—A gentleman applied to me respecting a copper-coloured eruption of the skin, and ulceration of the tonsils and uvula, producing a hoarseness in the voice and difficulty in swallowing, which previous treatment had appeared rather to augment than relieve. From a minute inquiry into the case, it appeared to me that the symptoms proceeded more from injudicious long courses of mercury than the complaint (syphilis) for which they were given. The patient, from being stout, was now reduced almost to a skeleton. I prescribed inhalations of iodine, iodide of potassium, and the juice of conium, with small internal doses of the iodide of potassium, combined with nitric acid and sarsaparilla, and generous diet. Under this treatment he quickly rallied, and by the further assistance of country air quite regained his health.

Remarks.—Inhalations of iodine, bromine, &c., will often prove of great efficacy in affections of the throat proceeding

from secondary symptoms, or other causes.

CASE XI. CHRONIC COUGH AFTER INFLUENZA.—A gentleman, residing near Tring, who described himself as being of a spare habit and naturally weak constitution, consulted me, per letter, respecting a chronic cough (the sequela of influenza), attended with viscid expectoration, soreness of the throat, pains at the chest, and impeded respiration, which had then existed, in despite of various ordinary remedies, for six weeks. As the cough was rather on the increase than decline, he feared that consumption might arise; and hence was induced by a former patient to communicate with me. Inhalations quickly allayed the cough and pectoral suffering, and in about ten days he was quite well.

Remarks.—The pulmonary irritation, as detailed in the foregoing case, is very frequently followed, when neglected, by confirmed consumption—which, it must be observed. makes its progress in the most insidious and treacherous manner. Persons suffering from what is termed a "slight cold" are too apt to disregard it, and, in consequence of exposure to alternations of temperature and draughts, "a cough" is the result. This cough, which, at the commencement, is a mere local irritation, after existing a little time is often accompanied by some of the following symptoms: occasional tenderness or tightness over the chest; shortness or quickness of breath on exertion, with a slight palpitation or accelerated action of the heart; languor, or indisposition to exertion, with, perhaps, feverishness or flushing of the face, and increased frequency of the pulse; want of refreshing sleep; a feeling of chilliness, more especially of the feet; softness and flabbiness of the flesh, and loss of strength of the hair, particularly in females, so that it cannot be kept in order as before, and sometimes falling off; occasional derangement of the stomach and liver; and an imperfect performance of periodical secretions. Either of, or all, these symptoms, which are too commonly disregarded, are found associated with those of a consumptive habit; but there are a variety of forms in which the disease may develop itself, respecting which no general rule or description can be laid down. The progress of these symptoms is very uncertain: sometimes they alarmingly increase, and the patient sinks in a few weeks; while in others it may continue in its course for months, or even years.

Should this work fall into the hands of a non-medical reader who can detect in himself, in his wife, his child, relation, or friend, any such *tendency* to pulmonic disease, it is to be hoped that, upon being reminded of the fatal conse-

quences of neglect, he will derive to himself a lesson of caution and circumspection, and instantly seek or recommend professional assistance. Let him not wait, as is, alas! too frequently done, until the disease has usurped a devastating reign in the system, which may resist every effort to control.

Hundreds, nay, thousands of persons in the enjoyment of the best health at the commencement of the year, fall victims, before the close of it, to a neglected cold or cough. I do not assert that, in every such case submitted to the influence of inhalations, pulmonary or bronchial disease will not be developed; but of this I am morally certain, that, in a vast

majority of instances, such will be the happy result.

In reference to the necessity of vigorously combating the slightest indications of pulmonary disease, Dr. Flood (On Tubercular Phthisis) truly observes,—"Except in a very small number of cases, we are not consulted at all until considerable progress has already been made in the disease; we may find our patient, at the very outset of our attendance, much emaciated with harassing cough, purulent expectoration, and occasional hæmoptysis; on application of the stethoscope, we may detect pectoriloquy, more or less distinct, leading to the suspicion of the existence of a tubercular cavity. and on percussion there may be considerable dulness over the upper and fore part of the clast, leading to the probability of much tuberculous induration—in short, we may find him in a state of confirmed Consumption. What is to be done? Are we, after listening and percussing and listening again, to shake our heads and say, 'My good friend, you are in a Consumption, nothing can be done to save you'? God forbid! The physician who intimates as much, though he does not say it in so many words, utters a libel on his artfor, although in such a case our prognosis ought to be exceedingly guarded, still much may be done, and much ought to be done. How? Not by setting out with the impression that the patient's disease is incurable, and that temporary ease is

all that we can promise him—not by prescribing potion after potion, with the view only of allaying some troublesome symptom—not by merely opening the bowels when they are confined, or confining them when they are open—not by promoting expectoration when too scanty, or checking it when too great: these, though they constitute nearly the whole of the present method of treating Consumption, could be accomplished by the veriest greenhorn who had spent but six months in his master's dispensary, almost as effectually as the master himself. They are well enough, so far as they go, inasmuch as they may relieve the distress of the patient, but as curative means they are utterly worthless—nay, they are eruel, because this very relief lulls the patient into a false security, and induces him to think that he is making way against his disease, at a time, perhaps, when he is on the verge of dissolution. No; we must take up arms boldly against the first great cause; it should be our endeavour to check the torrent itself, and not to occupy time, of which every moment is precious, in intercepting the straws which only serve to show how the current is running."

CASE XII. INCIPIENT CONSUMPTION.—A young lady of strumous habit, residing at Rochester, consulted me, by the recommendation of a relative, a former patient, who had been restored from what had been deemed an incurable disease of the heart. She was much reduced in strength, and suffered from a hacking cough of nine months' duration, with shortness of breath; animal heat 101°; constant pain over the left collar-bone, and tightness of the chest; pulse 95, furred tongue and loss of appetite, great depression of spirits, and irregularity of female constitution. I prescribed, at the outset, inhalations of iodine, but, the effect being unsatisfactory, I substituted the saturated solution of chlorine, combined with sedatives and expectorants, a counter-irritant over the clavicular region, gentle aperients, and afterwards preparations of quinine and steel. Treatment on this principle was pursued for three weeks, when the chest symptoms were overcome, she had increased in weight and strength, and was in a better state of health than she had been for a lengthened period.

Remarks.—This interesting case came under my observation in the year 1844. The lady has since been married, and has had several children, who, with herself, are in robust health.

Case XIII. Cough following Measles.—I was requested, in the spring of the year 1839, to visit a young lady, aged fourteen, of delicate appearance, whom I found suffering from a constant and most distressing dry cough, the consequence of an attack of measles, and which had existed for nine weeks. In addition to the cough, my little patient had experienced, for some days past, great oppression at the chest, with difficulty of breathing, feverishness, and palpitation of the heart. Inhalations of chlorine combined with a sedative were employed, with a little internal febrifuge medicine, by which means the cough, pectoral and other disturbance, quite ceased in seventeen days. At the expiration of that period I recommended her removal into the country, where her general health was completely restored.

REMARKS.—The parents of the young lady were most anxious as to the result of the treatment, having previously lost a child from consumption, induced by the same species of cough, which is a frequent source of inflammation of the substance of the lungs, and should on no account be disregarded, more especially when there is the slightest predisposition to pulmonary disease.

Case XIV. Chronic Bronchitis.—The wife of a tradesman, aged thirty-five, consulted me. She had been severely suffering for five years from cough, which was now attended with a muco-purulent and fibrinous expectoration, and difficulty of breathing. On listening to the chest there was no pectoriloquy, cavernous rhoncus, or other physical sign indicating tubercular disease, although almost all the general symptoms which usually denote this disease were present;

such as prostration of strength, emaciation, hectic flush, and nocturnal perspirations. By the administration of alterative and anti-spasmodic inhalations she rapidly got better, and remained tolerably well for three months, when, in consequence of taking cold, a slight relapse of the old symptoms occurred; they were again combated by the like means, and she perfectly recovered from the bronchial affection, and has remained in good health up to the present time.

Remarks.—This satisfactory case was occasionally seen by a talented practitioner (the former attendant of the patient), who, since this occurrence, has taken much interest in my mode of treatment, and has jointly employed it with me in many cases with the utmost advantage.

CASE XV. CHRONIC COUGH.—I was consulted, many years ago, by an aged lady, who had been subject to an here-ditary cough the greater portion of her life. The lady appeared to be in tolerably good general health, and she only complained of great distress and difficulty in dislodging the phlegm, more especially upon first waking in the morning, when she often feared that she should be suffocated. For the purpose of arousing and augmenting the nervous power in the bronchial tubes and lungs, from the loss of which the difficulty of expectorating mainly proceeded, I prescribed ammoniacal and balsamic inhalations, which completely accomplished the desired object.

Case XVI. Chronic Nervous Cough.—A captain in the navy, residing at Portsmouth, whose constitution, it appeared, was much broken down by a residence in a tropical climate and intemperate habits, consulted me, many years ago, for a chronic cough, to which he had been subject since his return to this country, a period of five months. He very minutely described his symptoms, which denoted great nervous debility, and a continued irritation of the mucons membrane of the bronchial tubes, with impeded breathing, and functional derangement of the liver and digestive organs. Sedative inhalations, together with a course of alteratives, and subscinhalations, together with a course of alteratives, and subscinhalations.

quently light vegetable tonics, quite removed the cough, and caused the digestive functions to be carried on with greater activity; in short, his general health and strength became better than it had been for very many previous years, and it has continued so up to the present time.

Case XVII. Loss of Voice.—A clergyman, residing in the country (who had paid much attention to the study of medicine), consulted me, per letter, respecting a friend who had for a long period complained of great irritation in the throat, and a weakness or relaxation of the chordæ vocales (or muscles concerned in the formation of the voice), attended with loss of voice, which rendered him quite incapable of performing his professional duties. The gentleman attributed the complaint to over exertion of the vocal organs. Many remedies had been tried in vain. I prescribed astringent and tonic inhalations, which in seven days quite removed the irritation in the throat, and restored the voice. A slight return of the complaint took place some few months afterwards, but it was quickly overcome by the same remedies; since that period the gentleman has remained quite well.

Remarks.—I have had numerous cases of aphonia in which inhalations have been successful after all other remedies had failed. So eminently valuable, indeed, are suitable inhalations in these common and distressing affections, that I scarcely remember an instance (where alone caused by excessive use of the voice in public speaking) in which their curative influence has not been speedily experienced and acknowledged by those who have adopted them. Their good effects would seem to arise, not only from acting directly on the part implicated, but also from imparting their influence, by a sympathetic action, to the nerves of the throat and bronchial tubes.

CASE XVIII. NERVOUS AFFECTION OF THE LARYNX.— The subject of this distressing complaint was a lady of pale and melancholy aspect, suffering under great nervous irritation, produced by trouble and anxiety of mind. She complained of a choking sensation, and a peculiar "crowing" cough, somewhat similar in sound to the whooping-cough, caused by a spasmodic constriction of the glottis. Inhalations, to act locally on the part affected, and mineral tonics, to diminish nervous irritability and improve the general health, together with pure air, change of scene, and the use of the shower-bath, quite reinstated the health of the patient.

Case XIX. Chronic Cough.—A lady, aged forty, of a nervous temperament, who had, at times, for four years, suffered from cough, dependent upon irritation of the trachea, consulted me, June 27th, 1835. Inhalations of conium were at first prescribed, but without producing much benefit; subsequently belladonna was substituted, and removed the cough, the cessation of which greatly improved the general health. The cough remained quiet for nearly nine months, when it returned, although in a somewhat modified form; similar inhalations were again resorted to with complete success, and the lady has been quite well since that time.

CASE XX. CHRONIC COUGH.—A young unmarried lady, of slight figure and delicate constitution, consulted mc in December, 1836, for a severe cough, which had baffled medical treatment for a period of ten months. She was greatly debilitated; pulse quick; slight and difficult expectoration; tongue feverish; bowels torpid. Stethoscopic examination gave no indication of pulmonary disease; but, upon pressing the trachea under the thyroid cartilage, the patient flinehed, and informed me that all along there had been great tenderness at that part. It was evident to me that the case was one of chronic inflammation of the lining membrane of the trachea. I prescribed inhalations of chlorine and conium, counter-irritation, &c. The administration of the chlorine at first caused some little difficulty of breathing, and increased the cough; but the quantity and frequency of the inhalations being reduced, these unpleasant symptoms soon subsided, and in six weeks she had quite recovered. Simultaneously with the inhalations were given preparations of steel, to improve the general health, and they fully accomplished the object that was intended.

CASE XXI. ASTHMA.—Many years ago I attended a married lady, aged about forty, who had been asthmatic for a considerable period. On the occasion of my first visit I found her lips of a deadly line, the extremities cold, with a clammy perspiration, and she was fighting in extreme agony for breath, as if fearing immediate suffocation; the fit lasted for about twenty minutes, and was finally relieved by a copious expectoration of puriform matter. Her friends informed me that she had been under medical treatment, but the remedies employed neither mitigated the distress nor altered the condition of the disease; and as her general health, which had been previously pretty good, now visibly declined, they became anxious about the result, and were desirous that she should put herself under my treatment. I prescribed balsamic and anti-spasmodic inhalations, with a very mild alterative medicinal course to improve the different functions, which were irregularly performed. Under this plan the dislodgment of the bronchial secretion was considerably facilitated, the difficulty of breathing removed, and by steadily pursuing the treatment advised for a short period she was cured of the complaint, and restored to a good state of health.

Remarks.—The immediate cause of the spasm in asthma appears to consist in a morbid contractility in the bronchial tubes, so diminishing their calibre as to produce a very limited admission of air, and thus prevent the change of the blood from venous to arterial. Hence it will be observed that the most extraordinary efforts will be made by the patient, in endeavouring by every muscular movement to enlarge the capacity of the chest, and increase the expansion of the lungs.

There are scarcely any conditions of the body which present a stronger picture of physical distress than a very aggravated case of spasmodic astluma. The patient feels as if his chest were bound with cords, and the larynx grasped with a tight hand; at moments he dreads suffocation; he desires every window and door to be opened, that he may have as much air as possible; he heaves and gasps and breathes convulsively; the lips and eheeks become purple, ehanging to a livid paleness; the eyes have a wild stare; the pulse is irregular, small, and quick; and a cold sweat starts out, and stands in drops over the forehead.

In many hundred cases of different species of asthma, in which the above distressing symptoms have been experienced, I have found treatment similar to that described in the preceding case—modified according to circumstances and idiosyncracy—equally successful. In fact, there are but very few cases of this nature which may not be materially relieved by appropriate inhalations, both in the paroxysms and intervals.

When the object is to remove viscid phlegm, and prevent its formation, various expectorants may be added to the inhalations, which, by exciting the trachial or pulmonary exhalant vessels to secretion, produce a free and easy dislodgment of it. When ipecacuanha is administered as an emetic (which is desirable in some cases of asthma, characterised by a congested state of the mucous surface of the lungs, by obstruction of the bronchial tubes from accumulation of phlegm, or a torpid state of the liver and biliary apparatus), this remedy does not, by inhalation, cause that prostration of strength and disturbance of the system which follow from taking it by the stomach; at the same time, it creates a peculiarly beneficial topical effect.

Case XXII. Chronic Cough.—A request was made that I should visit a lady a Birmingham, which (thanks to the expedition and facility of communication by railways) I was enabled to comply with. The patient, who was aged about thirty, of a lymphatic temperament, and enceinte, complained of a dry hacking cough, which had existed, more or less, for ten months, and was accompanied with loss of voice, tenderness at the throat, and great irritation throughout the whole of the upper part of the chest. The paroxysms of

coughing were particularly distressing, and long continued, at night time; so much so as to destroy sleep, and to make her fear, as well as her medical attendant, that the incessant coughing and straining might cause a miscarriage. complaint originated with an attack of influenza. I had an opportunity of seeing the prescriptions which she had followed; and I found that every remedy used in ordinary practice had been fully and fairly tried, without producing any permanent, and but little temporary, benefit. In this case it appeared to me that the tissues of the mucous membrane of the air-passages and vessels were preternaturally dry, from their texture having been altered by cold, and that a morbid irritation of the coats of the air-tubes had in consequence been produced. The patient was directed to employ ætherial and balsamic inhalations. In twelve days the cough was cured, and there was an evident general improvement in all the functions of the system. About a month subsequently I heard from her intelligent accoucheur that she had been safely confined; and since that period she has retained her natural health.

CASE XXIII. INCIPIENT CONSUMPTION.—A young lady, aged twenty-two, unmarried, of delicate constitution (residing at Gravesend), was placed under my care, labouring under the following symptoms: distressing cough, attended with a muco-purulent expectoration; difficulty of breathing, with occasional stitching pains over the left collar-bone; pulse low and intermittent; extreme debility, with loss of flesh; digestive organs out of order; tongue furred, appetite bad. The cough originated from catching cold, which had been neglected, notwithstanding she had very recently lost a brother from consumption. On examination by the stethoscope, the respiratory murmur, more particularly at the left side, was unhealthy, and the action of the heart was slow and irregular. Inhalations of chlorine, with sedatives, were prescribed, combined with mild aperient and tonic medicines. The amendment under this treatment was so rapid, that she was enabled to return to her parents in three weeks. The remedies were continued, at my request, for eighteen days after her reaching home. At the expiration of that time I visited her, and found that she was quite free from all signs of pulmonary irritation. I then took the opportunity of calling upon the medical gentleman who had previously attended herself and family, and he, most kindly and generously, expressed his admiration of the treatment which had been so successfully adopted.

CASE XXIV. CHRONIC COUGH.—A lady, residing at Manchester, consulted me, per letter, respecting her daughter, who was suffering from a severe cough, attended with much expectoration of thin frothy mucus, for the cure of which ordinary practice had failed. She had occasionally got better, but the cough sooner or later re-appeared, and became as troublesome as ever. The young lady commenced inhaling on March 20th, 1839, and was permanently cured in nineteen days, without the adoption of any other remedy.

CASE XXV. PALPITATION OF THE HEART.—A young gentleman, a merchant, of pallid and reduced appearance, and of intemperate habits, consulted me in 1838, and stated that he had for a considerable time experienced a violent aching and pricking of the heart, attended with a feeling of internal agitation, and a difficulty of breathing, especially after walking fast, or meeting the wind. On exploring the chest, no organic disease was discoverable; and the inordinate action of the heart seemed to depend on extreme irritability of the nervous system generally, and more especially of the nerves of the heart. The stomach was much disordered; and I attributed the difficulty of breathing, in some degree, to the effect of flatulence, which, by resisting the descent of the muscles concerned in respiration, impeded the free working of the lungs. Sedative inhalations were prescribed, in conjunction with internal bitters and antacids, a restorative regimen, and a quiet, regular, and temperate mode of living. He shortly quite recovered.

Remarks.—These affections of the heart are very frequently met with in practice, and especially by those medical men who have devoted much attention to this class of complaints; nor can the prevalence of them be surprising, when it is remembered how delicate and sensitive is the heart in its texture, considering the office it has to perform, viz. that of constantly overcoming a resistance, and of propelling forward a fluid by a succession of contractions, the average rapidity of which is seventy or eighty times in every minute of our existence. We see, too, that these motions of the heart may (through a reflex sympathy with different parts of the nervous system) by an infinity of circumstances be accelerated to an extraordinary degree, or depressed almost to cessation.

The employment of medicated vapours, in diseases of the heart, is submitted to the notice of the profession, with a full confidence of their superiority over the ordinary practice of giving remedies by deglutition. The modus operandi of inhalation I consider to be the immediate application of an air, saturated with the active principles of the remedies employed, to the pulmonary nerves, which being directly communicated from thence to the cardiac plexus, or the union of the eighth pair of nerves and great sympathetic, operates specifically upon the heart and its large vessels.

Case XXVI. Asthma.—A gentleman, a Chancery barrister, aged forty-eight, was afflicted with difficulty of breathing, chronic cough, attended with constriction at the chest. These symptoms, which had existed for nearly two years, became greatly exasperated in the winter of 1858, when the act of respiration could scarcely be performed from a sense of suffocation, accompanied with wheezing. So great were his sufferings at the time of my first consultation, that he was compelled to be supported, day and night, in an armchair, when he would for hours together, with livid lips and eyes dilated, gasp and struggle for one inspiration of fresh

invigorating air. All previous treatment had so totally failed, that both the patient and his friends almost despaired, not only of a recovery, but even of a mitigation of his sufferings.

Under such unfavourable circumstances was my treatment by inhalation commenced. To the surprise of everybody, he soon experienced so much relief that at the end of three weeks he was enabled to lie down in any position in bed, and breathe with comparative comfort; and there was a corresponding improvement in his general health. At the expiration of fifteen weeks his breathing was so good, that on the occasion of a visit to the Crystal Palace, he could run up, without experiencing any great distress, the steep hills of Upper Norwood, and has ever since, with the exception of an occasional slight cold, enjoyed a good state of health, and has been quite equal to the anxious and arduous duties of his profession.

In this case dry cupping was employed, in combination with inhalation, and proved to be a most valuable auxiliary.

Remarks.—The previous medical attendant of this patient attempted to dissuade him from adopting inhalation, having, as he expressed himself, "no faith in it." But here it may be again repeated that opinions may or may not be right. In the practice of medicine, facts are alone the test. If it is conclusive to say, "I was hungry and you fed me," is it not equally so to say, I gasped for breath and you gave it me; I choked with obstructions in my lungs, and you took the obstructions away; I was suffering with torturing pains, and you relieved me; I was sinking into hopeless despair, and you raised, upheld, and confirmed my hopes; and today I am better, more comfortable, and happier than before I heard of you and your treatment? Is this a testimony to be indifferent about? Is it not worth having? Is it not well obtained by years of toil, care, anxiety, and occasional resistance to jealous opposition? I say "occasional," being gratified to add that, in my consultations with numerous members of my profession, I have almost invariably met with that courtesy and respect which should ever exist among educated gentlemen; but, unfortunately, not always with that active and hearty co-operation which I had hoped for, and reasonably expected, if only for the sake of the poor afflicted patient, whose health, if not life, was in our keeping.

CASE XXVII. EFFUSIONS OF FLUID INTO THE PLEURA AND HEART.—I was requested some years ago, by a medical friend, to visit a patient who had partially recovered from an attack of acute pleurisy. He was a young man, aged about twenty, of plethoric habit, and the attack had been promptly combated by leeching, blistering, and mercurials. recovering from the acute symptoms, a very large quantity of fluid had accumulated at the pleura; and, as it had resisted for three weeks the remedies ordinarily employed, and appeared likely to fatally oppress the vital functions, if not speedily checked or absorbed, my friend was desirous of consulting with me upon the case. I suggested a trial of inhalations of iodine, the application of a liniment of the same remedy, with gentle friction to the chest. Some of the usual diuretic remedies were also internally administered. In a short time a weak respiratory murmur was detected by the stethoscope, which had been previously quite inaudible; and the physical and general signs, in a brief period, denoted a perfect recovery.

Remarks.—I have repeatedly treated, with the best effects, morbid effusions of coagulable lymph and serum into the pleura, and into the cellular membrane and substance of the heart, with inhalations of iodine—the most powerful and valuable absorbent we possess; and I strongly urge upon my professional brethren the importance and efficacy of this mode of practice, which I believe to be founded on sound physiological and pathological principles. In the present instance, iodine, digitalis, and other remedies, had been administered by the stomach (previously to my attending the case), but

they produced little or no diminution of the effused fluid, and caused great derangement of the digestive organs.

CASE XXVIII. Hæmoptysis or Spitting of Blood.—A young gentleman, aged twenty-one, of slight make and languid vitality, consulted me, and stated that he had been subject to a slight cough and occasional spitting of blood, occurring to the amount of half an ounce to an ounce or more, for the last eighteen months; and as the latter symptoms had of late much increased in quantity and frequency, and had withstood the ordinary remedies, he now placed himself under my care. An examination of the chest made it apparent to me that the blood exuded from the mucous surfaces of the membrane of the bronchial tubes, and that the complaint, which had been looked upon as the avant courier of consumption, would be speedily cured. I prescribed volatile astringent inhalations, in conjunction with cold bathing of the chest. In a few days the expectoration was very slightly tinged with blood, and the cough had nearly ceased. In twenty days he had quite recovered. This case happened in the year 1840, and the gentleman has remained in tolerably good health up to the present time, and has been quite free from the preceding symptoms.

Remarks.—Complaints of this kind fall almost daily under my observation; and the result of the plan of treatment by inhalation has convinced me that it is the only rational and successful way of bringing about a healthy state of the tissues of these parts, and a more natural condition of their actions, secretions, and circulations. It is, perhaps, necessary to observe, that in this affection inhaling remedies should be used in a fluid of the same temperature as that of the atmosphere, in which, however, their active medicinal qualities or principles are perfectly soluble and diffusible. The simultaneous internal administration of tannic, gallic, or sulphuric acids, combined with sedatives, and also the tincture of matico, acetate of lead, &c., will occasionally be found important adjuncts to the inhaling remedies.

Any discharge of florid blood, however inconsiderable the quantity may be, should always receive the earliest and best consideration of the physician, especially if it be preceded by flushed cheeks, difficulty of breathing, or any other symptoms indicating the approach of phthisis. But a spitting of blood, although it commonly denotes an unsound condition of the lungs, may sometimes be the whole complaint, so that not even a cough shall be joined to it, and the fluid will be brought up with as trifling effort as the easiest phlegm, and with as little danger as from the hæmorrhoidal vessels or those of the nose, especially if it happen after the meridian of life. A near relation of mine has been constantly subject to these effusions from the lungs for the last twenty-five years, and yet, from her appearance and general good health, there is every probability of her attaining a great age. In this instance, however, the hæmoptysis would appear to arise from the suppression of an accustomed discharge, and not from pulmonary disease. In the latter case it is always doubtful whether the ruptured vessel will heal, and much fear is to be apprehended from the fresh jets, by which the extravasated blood becomes deposited, and forms a perpetual stimulus to an irritable organ.

Case XXIX. Chronic Laryngitis.—A medical gentleman, residing in Suffolk, consulted me for a chronic affection of the larynx, which had existed for upwards of seven years, and had latterly become so severe as to incapacitate him from attending to his profession. He was much reduced in strength and appearance, and, as the usual medicinal means had failed, he now contemplated going to a warmer climate, and relinquishing practice. Before finally determining upon a step so detrimental to his domestic interests, he was desirous of trying my plan of treatment by inhalation. After adopting inhalations of iodine and conium, with counter-irritation, for a short time, I had the extreme gratification of hearing from my friend that he had derived the greatest possible benefit from them, and that (although not cured) he was so far re-

covered as to be enabled to undertake, without inconvenience, his professional duties, which he has ever since continued.

CASE XXX. MUCOUS CATARRH, SIMULATING CONSUMP-TION.—In the spring of 1840 I was requested to visit a young lady, unmarried, aged twenty, who had been suffering from influenza for two months, during the greater portion of which she had been confined to her bed. The medical gentleman, by whom I was called in consultation, considered her to be in the latter stage of pulmonary consumption. I found the patient much emaciated, and constantly tormented with a distressing cough and difficulty of breathing. The expectoration was puriform, extremely fetid, and copious, but not (as the microscope showed) tuberculous. The countenance was anxious and flushed; the sccretions morbid; animal heat 99°; the circulation very rapid; and acute pain upon pressing the lower part of the throat. Upon making a close stethoscopic examination of the chest, a mucous rattle was discernible, attended with a peculiar sort of hissing or wheezing noise, and the respiration was inaudible over the whole of the chest; but I could discover no cavernous respiration -no pectoriloguy, or any other sound which denoted tuberculous disease. I looked upon the disease as being mucous catarrh, and communicated this opinion to my professional friend, who, however, still adhered to his former diagnosis. The plan of treatment consisted in removing the local congestion by the application of leeches to that part of the throat which was tender upon pressure; in facilitating the expectoration, and allaying irritation in the bronchial tubes, by inhalations of chlorine and conium, and administering such remedies as were calculated to improve the tone of the vessels of the bronchial tubes, and of the system generally. The symptoms proved obstinate, but they eventually yielded, and she guite recovered. The lady, who has since married, and become the mother of a fine healthy child, is now perfectly well.

REMARKS.—In relating this case I am forcibly reminded

of the perseverance exhibited by the patient in fully carrying out the prescribed treatment, and her unfaltering confidence (amidst many discouraging circumstances) in its efficacy.

When the mind partakes largely of the complaint, as in the above instance, a feeling of hope and encouragement awakened in the breast of the patient will often be found one of the most valuable auxiliaries of which we can avail ourselves. To forcibly point out and convince him of the probability that he will find a cure in any particular plan of treatment, is to half bring about a recovery; while unfounded and continued anxiety of mind and mistrust will counteract and render abortive the best directed efforts that may be made for his cure. Whenever a feeling of confidence prevails, whatever may be the ailment, the mode of treatment is always less difficult to the physician, and more beneficial to the patient. — Plures sanat in quem plures confidunt.

CASE XXXI. CHRONIC COUGH.—A gentleman, residing at Oxford, aged fifty, consulted me for a cough of two years' standing, attended with expectoration of tough mucus, hoarseness, and a feeling of soreness at the top of the windpipe. In consequence of the failure of the usual remedies, he had requested his medical adviser to try medicated inhalations; but after a long course of treatment they proved equally unsuccessful. Notwithstanding this circumstance, the patient still felt assured that it was the only mode of practice from which he could reasonably hope to derive relief, and in consequence came to town and placed himself under my care. From a minute examination of the chest, there appeared to be no signs of tuberculous disease, the only unnatural sound being a hard, grating noise accompanying the passage of the air through the larynx; and it seemed to me that the cough arose from chronic inflammation of the larynx. I prescribed inhalations of chlorine and belladonna, combined with the external application of the acetum cautharides to the throat. In ten days the eough was much quieter, and the patient returned to the country delighted with the prospect of reeovery; nor were those hopes disappointed, for, by regularly using the remedies for three weeks, the complaint was completely removed.

Remarks.—In this ease the inhalations which had been previously given were not only the very reverse in their nature and operation of those which I successfully prescribed, but they had also been improperly prepared—the eommon tinetures having been substituted for the juices; neither had a proper inhaler been used. This is only one of numerous instances I could cite, in which the success of inhalation has been thwarted by an improper mode of administration. The practitioner in question had been frequently known to express his doubts of the value of inhalation; but the successful issue in this ease, and in others which subsequently came under his observation, convinced him that his scepticism really proeeeded from want of practice in this plan of treating disease, in which experience and nice judgment are essentially requisite to seeure those happy results which almost invariably arise from its proper application.

CASE XXXII. CHRONIC LARYNGITIS, "CLERGYMAN'S SORE THROAT."—The following ease eame under my treatment in the year 1851:—

" --- Parsonage, Yorkshire.

"Dear Doctor,—I am severely suffering, both mentally and physically, from a grievous malady of the respiratory organs, which medical treatment has appeared to me to have rather aggravated than modified—'incidit in Scyllam qui vult vitare Charybdim.'

"Feeling so much the force of this proverb, I had almost determined to entirely give up all further physicking, and leave Nature alone to do her work; but I have met with an old college friend, and a former patient of yours, the Rev. Dr. ————, who has strongly urged me to try your mode of practice by inhalation.

"Now, my dear sir, I have not only patiently listened to the statements and arguments of my friend, but have also perused with

much attention your interesting work on inhalation, and my feelings tell me that your views on that subject are correct. I have long seen the necessity of employing some topical application to the inflamed bronchial tubes and lungs, and am, in all other points of view, well satisfied of the reasonableness and value of your plan of treatment.

"Being quite incapable of undertaking the long journey to London, I have deputed a friend (the bearer) to wait upon you and make the necessary arrangements for your paying me a visit here as soon as practicable. Being most anxious to see you, pray make an early appointment, bearing in mind, Bis dat qui cito dat.

"I am

"Yours faithfully,

"ALFRED B. MADDOCK, M.D.

"P.S. I have enclosed a statement, which, although crude and rough, may yet afford you a slight insight as to the real nature of my ease, before personally consulting with me."

The statement above referred to was verbatim as follows:—

"My disease made its appearance with the ordinary symptoms of a severe cold attended with cough. I had little or no difficulty of breathing, except when ascending stairs, or making any quick movement, when both respiration and the action of the heart became slightly quickened. I had some tenderness about the throat, especially after much talking or reading aloud. Ever since this period, now ten months since, the cough has been gradually getting worse and worse, and my voice is now so weak that I am unable to make myself understood, so that I am obliged to keep a slate by my side to make known my wants and wishes. My heart sometimes beats violently; my memory is greatly impaired; I have no aptitude for study, or capacity for any intellectual occupation. The whole system, both as regards mind and body, is shattered; my existence is, I fear, a mere animal one.

"At the outset of the attack I weighed nearly 13 stone, but am now reduced to less than 10 stone, and am still losing flesh and strength. My cough is incessant, attended with expectoration of a reddish-brown (rusty, as I think it is called) colour, and sometimes an attempt to swallow solid food is accompanied with a peculiar spasmodic feeling, which seems to threaten me with suffocation. The only way I can then find relief is by sitting up erect,

and being fanned, and having all the windows and doors opened for the admission of more air.

"I should have stated at the commencement that I am aged forty-seven, married, without family, of naturally good constitution, and think you will say tolerably well-formed about the chest."

With the least possible delay I visited this patient, whom I found propped up in bed by pillows, looking the picture of misery and suffering. His breathing was laborious, attended with a constant cough and difficult expectoration; the voice was gone. General prostration of strength, accompanied with mental anxiety, and with more or less functional derangement of all the secretive and excretive functions. Much tenderness at the larynx, especially on pressure, with chronic inflammation of its mucous and submucous textures, and enlargement of the mucous follicles. A peculiar valvular sound was emitted from the jugular vein; quickened pulse; respiration 35; animal heat 104°. A slight dulness at the left side, under the scapular ridge, but no rhoncus in any part of the ehest. The impulse of the heart was of an abrupt bounding character, accompanied by venous and arterial murmurs, but no decided symptoms of organic disease.

The treatment consisted of sedative inhalations, followed up by those of an alterative and astringent character; insufflations of nitrate of bismuth; a succession of those counterirritants which produce a discharge of pus from the cutis; with occasional aperients.

At the expiration of six days the results of the prescribed treatment were communicated to me by the patient in the following words:—

"My breathing is certainly improved, and the cough, although still distressing, is not so incessant as it was before I commenced the inhalations. I have rested better at night. My voice is still inaudible, but there is not nearly so much of that peculiar rawness or roughness which I mentioned to you at our interview as experiencing in the throat. I consider that the counter-irritant has been

beneficial, and shall continue it until I hear further from you. I find the inhalations delightfully soothing to the breathing-tubes, and in fact they appear to calm the whole system, for I always feel more comfortable in myself after using them. Perceiving that your prescription centains a sedative, I am induced to tell you, as a curious and interesting fact, in favour of your mode of practice, that, previous to consulting you, my doctors ordered several times sedatives to be taken by the stomach; but I could never continue them on account of the dizziness, sick headache, and constipation which invariably followed.* I hope that you will not consider it necessary to make any alteration in the present inhaling remedies, for I am well assured that they are most applicable to my present symptoms; but this is a mere suggestion on my part, and of course leave the matter to your better judgment." * * * *

After the receipt of other encouraging letters, and at the end of five weeks, the patient gave the following report:—

"When I last wrote I told you that my voice was so far improved that I was able to converse in a whisper. I am now thankful and gratified to inform you that it is gradually getting stronger and stronger, and coming round to its wonted deepness of tone. The cough is nearly gone, and is attended with searcely any expectoration, except the first thing in the morning, when a little is dislodged, but without any difficulty. I breathe without effort, and have no pain or tightness at the chest upon making a deep cough or inspiration. I can count 30 without taking a breath. Those frightful spasmodic attacks to which I was formerly liable have wholly ceased for some time. The chief—I was going

^{*} Relative to this important point, the late Dr. Harwood of Hastings has observed, that the "advantages of inhalation are obviously great, in the administration of most nareotic remedies to persons unaecustomed to their use, and more especially that of opium, which medicine is well known to vary so materially in its action on different individuals, as to reuder the greatest caution requisite in its employment. And as relates further to the action of morphia, Battley's sedative, or to other forms of opium, I have long found that these may be inhaled safely and beneficially in cases of bronchial irritation and coughs, without inducing that torpid or inactive state of the bowels, their necessary doso is so liable to occasion when otherwise administered; a fact which opens to us an interesting viow of the advantage of this local application only of narcotic modicines."

to say the only—thing I complain of is weakness, with occasional mental despondency."

The general health of the patient was now improved, by the exhibition of mineral tonics, generous diet, the cold shower-bath, and by paying strict attention to the condition of the stomach and bowels. At the termination of a period of nine weeks from the commencement of the treatment I had the happiness of receiving the ensuing statement:—

"I am daily gaining flesh and strength. I breathe as well as I ever did in my life, and the cough has wholly ceased. My voice is so strong and firm that last Sunday I was enabled to perform full duty (and my church is a large one) without suffering any inconvenience therefrom. My appetite is good—headache gone—and spirits excellent. In short, I am now in capital health. I often thank God that I ever heard of you, and pray that He may reward you both in this world and in that which is to come."

The patient has remained quite well up to the present time.

REMARKS.—This is, by far, the most important form of larvngeal disease, since it springs from slight causes, and is a very common and most distressing malady. It always ends, if neglected, in more or less injury to the voice, and too frequently in consumption. The symptoms are generally very mild in the commencement, and liable to mislead the patient into the idea that there is no danger. Sometimes a little pain is felt in the larynx, but more commonly only a tickling sensation, which provokes coughing. Many persons complain of a sense of something sticking there, and to get rid of it they are constantly rasping and clearing the windpipe. Usually, we find a striking change in the breathing, and in the voice. The breathing becomes loud and prolonged, as the obstruction increases, and when it has become considerable we have a peculiar stridulous sound. The voice is almost always changed. At first it is hoarse, and then gradually becomes more and more feeble, as the disease progresses, until it is

scarcely audible. If ulceration of the vocal chords takes

place, we have a total loss of voice.

These symptoms are only present in the severer forms of Chronic Laryngitis; in the majority of cases only a feeling of obstruction is experienced, and the effort to clear this away occupies a considerable part of every conversation with a friend. One of the first effects produced in the mucous membrane by chronic laryngitis, is a thickening. Its surface becomes hard, rough, and irregular, which, extending to the vocal chords, destroys their freedom of action.

Chronic Laryngitis very frequently occurs from excessive use of the voice; and hence this form of disease is very common in clergymen, lawyers, and all public speakers. The vocal organs, by straining and over use, become exhausted and lose their tone. There are various phases of this disease; from the slight huskiness and failure of voice, from which many clergymen painfully suffer every Sabbath, to those destructive ulcerations of the cartilages marked by the total loss of voice, severe and almost constant cough, and expectorations of frothy mucus, mingled with pus. The most intimate connexion exists between affections of the throat and those of the larynx. The reason is easily understood. Every breath drawn passes directly from the inflamed throat into the larynx. They form but different parts of the same tube, and are lined by a common membrane—one over which irritations spread rapidly. Again, the parts are in immediate contact, and the mucus secreted in the throat becomes entangled about the epiglottis and entrance into the larvnx, and is often drawn in by one inspiration, and forced out by the next expiration. Chronic Laryngitis often occurs in advanced stages of Consumption, from the irritation produced by the pus discharged by the lungs. It is one of the most distressing complications of consumption, and adds doubly to the patient's distress. In this form there is always more or less ulceration about the vocal chords, beginning on the lower side, and gradually extending upwards. These ulcers often penetrate

through the mucous and cellular membranes, involving the museular tissues, and not unfrequently attack the ligaments and eartilages themselves. But all these distressing results may generally be averted or overcome by judicious and prompt treatment.

CASE XXXIII. CONSUMPTION.—A lady aged forty, of slight make and serofulous constitution, consulted me for a chronic eough, attended with extreme debility and emaciation. The patient stated that she had, in early life, two severe attacks of pleurisy, from the effects of which she had never quite recovered. Her general appearance entirely assumed the aspect of a consumptive patient, and the stethoscope afforded signs of peetoriloquism at the humoral extremity of the right elaviele, and on pereussion the sound was found to be dull all over this portion of the chest. The pulse varied from 105 to 115; the animal heat 101°; she could not count more than seven without taking a breath; the inspirations thirty-one in a minute. The expectoration was profuse, and she occasionally suffered from night perspirations. The slightest change in the wind or temperature gave her cold, and made the cough almost unendurable: the tongue was coated; the appetite impaired; the bowels very loose; and she eomplained of want of sleep.

I prescribed a preparation of iodine and conium, to be inhaled twice daily, and a vesicating and iodine liniment to be applied over that portion of the chest where the pulmonary disease existed. The trisnitrate of bismuth was taken internally to overcome the diarrhea. At the end of a fortnight a slight beneficial change had taken place both in the nature and quantity of the expectoration, and the cough was less frequent. The diarrhea had quite ceased, and she expressed herself as feeling stronger and better in every respect. I now increased the strength of the inhalations, and prescribed the oleum morrhuæ (cod-liver oil) to be taken twice a day in an aromatic bitter. In six weeks the cough was overcome, and she was quite free from those violent paroxysms which

had formerly oppressed her, and the perspirations had ceased. Her ficsh had increased in a more remarkable manner than I had ever before witnessed. The same treatment, modified according to symptoms and circumstances, was steadily persevered in for rather more than three months, by which period the cough had quite ceased, the pectoriloquism was changed for a mere resonance, and she was restored to average good health.

Remarks.—The above case (which, I was given to understand, had been pronounced a hopeless one) very strongly exhibits the curative influence of medicated inhalations, and also the beneficial effects of cod-liver oil in fattening the consumptive patient; and this is of very great importance in the treatment of those diseases where, by the wasting of their natural covering, the superficial vessels are exposed to the influence of every change of temperature in the air. The shielding of the vessels from the influence of cold, by an increased deposition of adipose matter, appears to be one of the chief objects gained by the use of the oil.

The great merit of cod-liver oil as a nutriment lies in the fact that it is an animal oil, so easy of assimilation as scarcely to require digestion. It is really doubtful whether it undergoes any material change in the stomach. It seems to be simply absorbed and deposited as fat in the cellular tissue beneath the skin, thereby forming an additional covering to the body, thick in some parts and thin in others, as nature requires to protect the sensitive and vital parts beneath.

The influence of a good covering of fat is strongly illustrated in the difference in the sensations experienced by fat and lean people on a cold winter's day. Fat people then become unusually blithe and gay, their eyes sparkle, their complexion is fresh and clear, and they show us in all their actions that they are in a congenial element. Thin, meagre, lean people, on the other hand, shrink up within themselves, the skin becomes blue, the teeth chatter, and every gust of

wind seems to make a ready passage through their attenuated forms. Reverse the weather, and we change instantly their condition. On a hot summer's day the "shadow of a man" is in capital spirits, and ready for any enjoyment; while the fat man, per contra, puffs and blows and perspires like an overstrained engine.

This simple illustration will serve to show why eod-liver oil is so much more beneficial in cold than in hot weather, and why it benefits eonsumptives after the body has begun to waste, and not before. When the system requires the nourishing and protecting influence of the oil, it will generally agree; but I have never seen any good to result from its use until after the patient began to lose flesh. In the winter a eovering of fat and a covering of flannel exert a similar influence—they protect the superficial vessels from the impression of cold, and keep up the circulation of the surface.

Cod-liver oil is unquestionably a valuable nourishment in certain chronic diseases attended by wasting of the body, among which consumption is the most prominent and important. But I cannot regard it as a medicine. To do so would be to remove all distinctions between food and medicine. I believe, in fact, that it is wholly devoid of medicinal properties. Were not this the case, we should find it most beneficial in the earliest stage of consumption, yet we know it to be most beneficial in the third stage, after suppuration has eommeneed—and at that period of the year most favourable to the eure of this disease, viz., the summer and early autumn, when in reality experience establishes the very reverse to be true.

And yet, for several years, cod-liver oil has been almost the only medicine prescribed for the eure of pulmonary diseases. It has been emphatically THE GREAT REMEDY of the profession, and no nostrum was ever more empirically administered. In all stages and forms of eonsumption, and under every variety of circumstances which surround this disease, it has been given almost as a specific. Now what are the results attained by its use? The bills of mortality show an increase in the number of deaths from pulmonary diseases equal to, if not greater than, the ratio of increase in the population. There has been no decrease in either their prevalence or their mortality. The sales of the oil have steadily decreased for several years, until it is questionable whether for every six gallons consumed three years ago one is consumed to-day. Then everybody hoped miracles from its use as a medicine—now comparatively few persons can be induced to take it even as a nourishment. From one absurd extreme we are fast verging to the opposite.

Now, elearly, all this is very foolish and very wrong. Cod-liver oil has certainly failed as a medicine, but it has firmly established its claims as an important article of diet in many exhausting diseases. Properly employed, and in suitable cases, it supplies the system with a peculiar nourishment required to counteract the waste going on, and at the same time saves the stomach from much labour in digestion. It is therefore an important dietetic aid to a proper and rational treatment of many cases of consumption, and should be so esteemed by the public and the profession.

Case XXXIV. Chronic Cough, with loss of Voice.— The following interesting ease eame under my observation:—

"Liverpool, July 17th, 1846.

"Dear Sir,—Two friends of mine, Mrs. —— of this eity, and Mrs. —— of Manchester (the former you will probably remember suffered under consumption, and the latter from severe asthma), assure me that they were perfectly restored by medicated inhalations to a state of health, after their cases had been considered as irremediable. From these very favourable accounts of your mode of practice, I am induced to lay my own case before you, which has hitherto baffled all treatment.

indebted for much kindness and attention. Indeed, I am well convinced that, if the *ordinary* mode of treatment were *capable* of curing my ailment (which a sad experience now convinces mo it can *never* do), I should have no cause to address you upon the present occasion.

"My age is forty-one, married, the mother of three children. I am of slight stature, fair complexion, but should say of an average good constitution. My parents are alive and have attained a good age, although neither of them ever looked very robust. I lost one child by croup, but the others are healthy.

"In the year 1840 I had a very severe attack of influenza, which confined me to the house for nearly two months, and ever since that time I have been subject to a 'winter cough,' attended with profuse expectoration, requiring long-continued and distressing efforts in its expulsion; palpitation of the heart; shortness of breath; and a peculiar wheezing or hissing noise in the throat, more especially when going up-stairs. All these symptoms have heretofore disappeared at this season of the year, but I grieve to say that I now feel worse, and suffer more inconvenience than I ever did, even in the winter months, for my voice is nearly gone (which never happened before), and I have a most painful difficulty in speaking, even in a whisper.

"I fear that my digestive organs were much impaired by the constant exhibition of 'cough medicines,' for ever since I abandoned the use of them (now about three weeks ago), I have gradually gained flesh and strength—all the functions of the system, indeed, now appear to be healthfully performed, with the exception of those allotted to the bronchial tubes. I feel, however, very nervous, which I chiefly attribute to loss of sleep at night from the urgency of the cough, and now write under great dejection of spirits.

"I shall be very glad to find that you can treat my case by correspondence; but my husband requests me to say, if a personal interview with me is *indispensable*, that he will gladly make an arrangement with you (as I cannot myself bear the fatigue of so long a journey) for paying me a professional visit.

"Hoping that you will give this statement your earliest consideration, and anxiously awaiting your reply, I beg to subscribe myself,

"Yours truly,

[&]quot;To Alfred B. Maddock, M.D."

I visited this patient and immediately put her on the plan of inhalation, as laid down in former cases, and recommended her to abstain from taking every kind of internal medicine. In six days after the commencement of my treatment I heard from her as follows:—

"My whole chest has been soothed and comforted by the inhaling remedies, the cough is decidedly quieter, and my voice, in the brief space of three days, was completely restored."

At the termination of thirteen days I received the following report:—

"My voice continues well, the cough is still more alleviated than when I last wrote, and the expectoration, which, when I first consulted you, was more than a pint in the twenty-four hours, is now diminished to about an ounce in that time, and is disengaged without any difficulty. * * * I have already attained a better state of health than I could have contemplated, and now confidently hope, by strictly carrying out your injunctions in every respect, that I shall be quito restored."

In five weeks all bronchial irritation had ceased, and the patient's expectation of recovery was fully realised. On several subsequent professional visits to Liverpool, I had the great satisfaction of congratulating the lady on her continued good health.

CASE XXXV. CHRONIC COUGH, WITH RELAXATION OF THE THROAT.—A gentleman, resident in Bristol, consulted me in the year 1851, and, previous to our meeting, forwarded the following statement, which I give *ipsissimis verbis*:—

"I am aged 45—married, with a family—height five feet ten inches—slight make—temperate habits. Three years ago I eaught a severe cold, which was attended with much irritation at the back part of the throat, and of the membrane of the nose. These symptoms were shortly afterwards accompanied by cough, from which I have more or less ever since suffered. In the morning I cough six or seven times, and bring up a dark gray matter each time about the size of a common nut, and sometimes rather larger; and it appears to me as if it came from the top of the throat, which

is much relaxed. During the day I expectorate a little stringy matter, which I suppose proceeds from the bronchial tubes. I am always worse in warm damp weather, and more especially when rain is approaching. At one time I could sing tolerably well, but eannot do so now. I sleep indifferently. The first two years I tried seven different physicians (some of them men of eminence), and have taken, I may say, buckets of medicine, without deriving any benefit. I have latterly been treated by a homoeopathic practitioner, but without any advantage; and am now so perfectly disgusted with 'doctor's stuff' (as the peasantry eall it about here) that it is my firm determination not to take any more, even in infinitesimal doses. I mentioned this resolution to Mr. patient of yours, and he has urged me try your mode of practice by inhalation. To this plan of administration I have no objection whatever, but assure you that my stomach positively recoils at the very idea of having any more internal physicking. Can you satisfactorily treat my case under such circumstances? if so, I shall be too glad to avail myself of your services. In conclusion, I should add that I have not at the present time much to complain of as to my general health, which has been gradually improving since I discarded medicine. My ailment seems to me to be chiefly, if not wholly, of a local character."

I did not hesitate to undertake, upon the terms implied, the treatment of this ease, which consisted of balsamic and astringent inhalations, varied according to circumstances. By these means, aided by tannic acid gargles, together with the occasional employment of an outward application to the throat composed of sodæ muriat., g. eampli., aq. am. fort. and sp. vin. reet., I entirely removed, in three weeks, the cough and all bronchial irritation. The gentleman, in reply to a letter which I subsequently addressed him, assured me that he had "no return of the complaint" for which I attended him, and that he "enjoyed most excellent health.

Remarks.—Although medicated inhalations must be regarded in many complicated affections of the respiratory organs rather as powerful auxiliaries than being per se sufficient, yet I frequently meet with different species of cough and bronchial irritation which are susceptible of cure

(as exemplified in this and the preceding case) without the intervention of any other remedial means. Catarrhous cough most frequently arises from some degree of inflammation of the pituitary lining of the organs of respiration; and if the disorder of the membrane is only the effects of a cause which is topical, it becomes reasonable to suppose that a well-adapted local remedy would be productive of the same good consequence in this as in other species of inflammation.

Case XXXVI. Simulated Consumption with Mental Exhaustion.—A gentleman, aged forty-nine, had been suffering for eight months from severe cough, attended with increased bronchial secretion. For the last three weeks he had experienced great difficulty of breathing and palpitation of the heart, lost flesh, and occasionally suffered from night perspirations. These symptoms, which he had been told were sure indications of pulmonary disease, greatly alarmed him (there being a predisposition in his family to consumption), and brought him into a miserably dejected state. His friends particularly directed my attention to the fact that, whenever the cough was aggravated by taking cold, or the action of the heart accelerated by extra exertion, or any other cause, his mind then became unusually excited, and his general conduct violent and overbearing.

The general appearance of this gentleman certainly favoured the conclusion that he was labouring under tuber-culous disease, but on applying the stethoscope, and testing the vital capacity of the lungs by the pulmometer, it was apparent that the substance of the lungs was healthy, and that the difficulty of breathing and cough were dependent upon chronic inflammation of the bronchial tubes. Upon examining the liver, I found that it was slightly enlarged, and so tender, that by the least pressure or violent inspiration an aggravation of all his distressing feelings was created. The evacuations were of a highly morbid and offensive character.

From an attentive review of all the facts of this case, I was led to the conclusion that the primary origin of the

whole mental and bodily disturbance was a congested state of the liver. I accordingly directed my especial attention to that organ, and prescribed the application of leeches, followed up by vesicants and small doses of those medicines which were best calculated to remove the congestion. I also ordered the local application of sedatives (by inhalation) to the mucous surfaces of the air-tubes. Great relief was afforded by this treatment, and in sixteen days I had the pleasure of seeing the patient in good spirits and convalescent. I then advised him to have change of air and scene;—by these new associations the mind was agreeably occupied, and diverted from distressing topics; the secretions of the different viscera were regularly performed, and I had the happiness, upon my friend's return home, of congratulating him upon his perfect recovery.

Remarks.—In this instance the employment of soothing inhalations to the irritated mucous surfaces of the bronchi was attended with the best effects; but the case is chiefly introduced as exhibiting in a strong point of view the powerful influence which derangement of the liver exercises on the respiratory organs and the heart, and through them upon the brain, and also the nice discrimination that should always be made in pectoral cases, whenever cough is a leading symptom.

Possessing very similar functions to the lungs, the liver is extensively employed by Nature in the elaboration of carbon from the blood. As the great venous trunk, whose numerous branches diverge through and around the parenchymatous substance of the pulmonic tissues, serves as a repository and revivifier of the spoiled and used-up blood, so does the great Vena Porta of the liver, with its innumerable ramifications so copiously disseminated throughout the entire substance of the organ, act as a reservoir for that portion of the sanguineous fluid which has been employed in and completed its circle throughout the digestive apparatus. In one important respect the liver is distinguished from any other

sccretive organ in the body: for, while all the other eliminatory phenomena are abstracted from the external circulation, in this viscus the necessary separations are effected from venous blood alone. Both seem in their several capacities as media by which carbon is detached from the great mass of the circulation—by the lungs, from its union with oxygen, in the form of carbonic acid; and in the liver by junction

with hydrogen, in the shape of bile.

Food of various sorts, containing a larger quantity of carbon than the lungs are capable of evolving from the system, requires the energy of the liver for its complete Accordingly throughout the entire animal kingextrication. dom, the magnitude of the liver bears an inverse proportion to the capacity of the lungs: as the one is found relatively small, so is the other correspondingly large. In the early feetus in utero the lungs are but slightly developed, while the hepatic organ is immensely voluminous. Respiration not vet being called into operation, the liver becomes nearly the sole emunctuary of the elimination of carbon. In diseases of the one apparatus it is also observed that the activity of its fellow is considerably augmented. In pulmonary disorders, where, from tuberculous deposits, or congestion from whatever cause, much difficulty of decarbonization exists, the great abdominal reservoir is endowed with largely added power, and an extra amount of carbon is thereby removed through its agency from the system. Hence will be seen the obvious necessity which exists of these large and important organs being in a sound and healthy condition.

We are indebted to the late Sir Charles Bell for having dispelled much of the intricacy and confusion formerly attached to the distribution and connexion of nerves; and it is now clearly seen that sympathetic connexion exists between the nerves of the stomach, the heart, the lungs, the brain, and other organs. There is the junction of the pharyngeal with the eighth or wandering pair: this extending onwards to join the sympathetic,—this junction with the sympathetic,

supplying the stomach and the liver, and branching forth again,—is connected with the diaphragmatic; thus altogether establishing an union between the base of the brain with the respiratory and the visceral organs that gives rise to and accounts for that intimate and remarkable connexion of one part or organ with another: the great centre of combination, the ganglionic plexuses, being near to and about the region of the stomach.

The media of association, indeed, between the organs of the chest and the abdomen are so direct and unequivocal, that we cannot wonder, from these causes and from contiguity of position, any disorder of the former should so frequently be participated in by the latter.

It has been supposed by some physicians that consumption always dates its origin from diseases of the abdominal viscera; but this is an extravagant speculation, which is not supported by pathological investigation, or by analogical reasoning. Indeed, so correct is the doctrine which involves the converse of this opinion, that minute microscopic anatomical research has proclaimed and verified the assertion that, even in the fætus in utero, long before gastric or intestinal irritation can be supposed to exist, the germs of tuberculous disease are sometimes obviously visible, in such as would seem to be predestined to those diseases, which their development almost invariably produces.

At the same time it must be admitted that the irritation caused by a diseased liver or stomach oftentimes extends its influence to the lungs so effectually as to establish, in despite of all treatment, severe pulmonary disease. I have frequently remarked that whenever consumption has, for the first time, appeared in a family, either one or both the parents have suffered under derangement of the hepatic organs. In these instances, and in many irritable and inflammatory habits, any mistake on the commencement of the disease is of the most serious consequence—for in such a case organic changes may be gradually engendered, and the

liver, diaphragm, and lungs adhere and suppurate, a purulent spitting succeeds, and, instead of a pure uniform pus, the substance of the liver is expectorated by a deep hollow cough in the form of a glandular membranous appearance, mixed with the purplish dissolved blood of a parenchymatous appearance. Persons more especially of a bilious temperament should therefore never disregard, as is too commonly the case, what is called a "stomach cough;" for, as the acute Beddoes has remarked, "If your patient 'bark' but once, fear that there be a murderer within, and, though dislodged, expect him again—he now knows the way!"

It is frequently observed that mechanical distention of the stomach or alimentary canal, by the accumulation of flatus or gaseous secretions, may, by pressing upwards upon the left lobe of the lung, and thereby diminishing its respiratory area, very materially interfere with the freedom of its action. The enormous flatulous distension of the stomach, frequently met with in hypochondriacal and hysterical subjects, acts in this manner, and often adds a very considerable amount of acute pain to the evils necessarily produced by so large an amount of pressure on the surrounding viscera. Moreover, the mechanical force exerted by a full stomach upon the Aorta, Vena Cava, and other large contiguous vessels, may, to a certain extent, and often to a larger amount than would be credited, prove an additional source of interruption to the ease and regularity of the respiratory process, by retarding or throwing back again upon the heart that blood whose fitting destiny is propulsion forwards through the lungs. For these reasons the nicest judgment and tact are required to discriminate between derangements of the respiratory organs from those of the heart: for while the functions of the lungs influence the functions of the heart, so in like manner does the heart re-act upon the operation of the lungs. From the nature of this sympathy (pulmo-cardial), no change, however slight, can occur on the one part, without producing some correspondent change in the other. Even in a state of

health the direct relation and sympathy existing between these associated organs is very clearly exhibited, by the effect which an accelerated action of the heart gives in increasing the frequency of respiration, and how an increased velocity in the act of breathing quickens the cardial and arterial circulation; and, indeed, the merest glance over these phenomena evinces that every perceptible alteration in the function of one of these two vital organs is followed by some modification in the functions of the other. If such, then, be the intimate connexion of these organs in a healthy condition, what else can be expected when either of them becomes diseased?

These facts, with various disorganizations of the respiratory system, such as asthma, chronic and nervous cough, loss of voice, and hemorrhage from the lungs,—all of which may result from an unhealthy action, sympathetically excited by derangement of the abdominal viscera,—open a wide and most important field of interesting inquiry: a field hitherto but little cultivated, but offering fame and satisfaction to him who shall faithfully and earnestly devote his vigorous energies and patient observation to its scientific exploration.

In many affections of the chest the mind also largely partakes of the general disorder—as observed in the preceding case, which is extracted from my Treatise on Nervous Disorders.* Indeed, it cannot be denied that the most important pathological sympathies subsist between visceral ailments and functional disturbance of the brain and nervous system. Owing to this sympathy, the sleep frequently becomes uncertain and interrupted by frightful dreams, the temper fretful and incapable of concentrating itself on any subject, and the mind anxious—and there is then more general nervous sensibility than is natural. In some instances the mental sufferings of such patients are indescribable, and to such a length have they often been carried, that suicide

^{* &#}x27;Practical Observations on Mental and Nervous Disorders.' Simpkin, Marshall, and Co., Stationers' Court: II. Baillière, 219, Regent Street.

has been the consequence. Hence the propriety of the poet's prayer for the "mens sana in corpore sano"—which can only be obtained by a proper regulation of the different functions of the animal machine, which equally influence the immaterial as the material part—for anything which disturbs the equanimity of the mind interrupts the healthy functions of the digestive and other organs, which in their turn re-act on and aggravate the mental disquietude.

Affections of the nervous system are not, however, my present theme, and I must refer those readers who are concerned in this highly important and interesting subject to the work before alluded to, in which I endeavour to show, as observed by the immortal bard,—

"The body and mind are like a jerkin and a jerkin's lining; rumple the one, and you rumple the other;"—

and although no medicine exists, technically speaking, antimaniacal—no medicinal febrifuge for the exacerbations of the mind—no evacuant which can relieve the spiritual portion of our frame from the load that oppresses or disturbs the freedom of its operations, yet, that the wonted vigour and serenity of the mind, thrown off its balance by some erring fibre or faulty secretion, may, in most instances, by attention and judicious treatment, be restored to its pristine integrity.

CASE XXXVII. CHRONIC BRONCHITIS.—In the year 1847 I treated the following case by epistolary correspondence:—

[&]quot; —— Parsonage, Warwickshire, Dec. 19, 1847.

[&]quot;Dear Sir,—I am a elergyman, and have purehased a copy of your interesting work, in consequence of having read a notice of it in the 'Ecclesiastical Gazette.' An attentive perusal of the volume has well convinced me of the great value of your mode of treatment by medicated inhalations. It would seem, indeed, to be self-evident that the practice of bringing the sanative properties of the remedies into immediate action upon the seat of disease must constitute a powerful therapeutic agent.

[&]quot;I lent the work to an old medical friend, Mr. ----, who is

on a visit down here; and he quite agrees with me in thinking that your plan of treatment is based upon a very sound and rational theory. Mr. ———, however, hesitates to prescribe for me, having had little or no experience in this mode of practice; and he has urged me to lay my case, in my own words, before you. May I therefore beg your prompt and careful attention to the following statement?

"I am aged 40 years, married, of slight form and rather delicate constitution. About three years ago I was attacked with acute inflammation of the lungs. I was then twice bled from the arm. likewise blistered, and put under the influence of calomel and opium, and other active remedies. By these measures the more formidable symptoms were removed, and in the course of a few weeks I became convalescent. I remained in tolerably good health until about seven months ago, when, after taking cold, I was seized with inflammation of the bronchial tubes, attended with a cough, most distressingly irritable both by day and night. I always have had, and still have, the greatest difficulty in dislodging the expectoration, more especially the first thing in the morning; and a long struggling effort of this kind caused me, ten days ago, to bring up about a dessert-spoonful of blood, which my medical friend says was arterial. This circumstance has caused me much alarm, not only on my own account, but on that of my wife and children, who are dependent upon me. I have never before or since pereeived any blood in the sputum, which is of a partly flaky and yellowish appearance, and sometimes very thick. My mouth feels parched and feverish, and the tongue is coated. I have a particularly unpleasant metallic sort of taste in the morning. The bowcls are obstinately costive, and the urine is of a very high colour. pulse is usually about 100. The breathing is much hurried by the least exertion; and I always experience, more or less, a feeling of tightness and oppression over the chest.

"After passing a very restless night, I sometimes suffer from morning perspirations, which appear to greatly weaken me, and render me very nervous. I cannot but think that this excessive action of the skin has been greatly, if not wholly, caused and kept up by the opiates which I have been constantly taking to assuage the cough, and to the same circumstance I attribute the inactive state of the bowels and the general feverish condition of my system. I perfectly agree with you that much mischief often accrues from the incautious administration of medicine to the stomach for diseases

affecting the chest, by destroying or impairing the important functions of the digestive organs—thus proceeding, as the French say, 'de mal en pis,' from bad to worse. * * *

"I am, yours faithfully,

"To Alfred B. Maddock, M.D."

The treatment in this interesting case consisted in the exhibition of sedative and expectorant inhalations, combined with the internal administration of aperients and alteratives. In a week the patient wrote thus:—

"I breathe better, and have not so much uneasiness and oppression about the chest. The expectoration comes away much easier, and the colour of it has improved. The cough is still very trouble-some, although not so much so as when I last wrote. I am glad to say that I have spat no more blood, which has been a great relief to my mind. The internal medicine has acted most satisfactorily; the feverish symptoms and perspirations are abated, and I feel much lighter and happier in myself. The dejections were of a highly offensive character, and afforded ample evidence of the disordered state of the stomach and other internal organs. I sleep better at night, which I ascribe to the delightful soothing effects produced by the inhalations." * *

The inhalations were steadily pursued, and especial attention was directed to still further improving the condition of the assimilative organs.

The case continued to progress in the most satisfactory manner. In five weeks I received the following welcome intelligence:—

"I am thankful to say that my health—the gradual improvement of which I have been enabled to announce to you from time to time, ever since adopting your treatment—is now quite re-established. * * * My pulse ranges from 75 to 80; the respiration is so perfectly easy and natural, that I was enabled last Sunday to perform three duties without suffering the slightest inconvenience. I have no cough whatever, and the whole of the

functions appear to be healthfully and pleasantly discharged. I can now placidly dispose myself to rest about eleven and sleep well till between six and seven. Your inhalations have really acted like a charm. * * * Opiferque per orbem dicor is a motto you might well appropriate, and I hope that a suffering friend at a distance will follow my example, and have the wisdom to seek relief at your hands."

CASE XXXVIII. INCIPIENT CONSUMPTION.—In the February of 1841 I was consulted by a young lady, aged seventeen, of pallid appearance, with a peculiar sharpness, or wasting, of the features, contracted chest, and scrofulous habit, inherited from her parents, both of whom had died of consumption. She had cough, attended with expectoration; occasional pains under the breast-bone, with difficulty of breathing; and severe palpitation after the least exertion; but no pain or tenderness over the region of the heart. There was fever, but little or no nocturnal perspirations; the pulse 120; the urine and bowels natural—irregular in female constitution. On examining the chest the following physical signs were elicited: respiration very dull over the superior parts of the chest, anteriorly and posteriorly; and on and below the collar-bone on the right side there was much less resonance on percussion than on the other side. The heart acted in a very rapid and irregular manner; and, with each beating of the pulse, a sound was heard which appeared to denote that the valves did not properly do their duty, and thereby caused some obstruction in the circulation. The treatment consisted in alterative and sedative inhalations; at the same time febrifuges were employed internally, and, when the symptoms permitted, they were followed up by tonics, composed of steel and quinine. In twelve days a decided improvement took place, and in a month she had quite recovered, and has remained well ever since.

CASE XXXIX. Consumption.—In the year 1852 I received a letter from a gentleman, then residing in the vicinity of town, requesting me to visit him, and at the same

time was enclosed the following statement of his case, for my previous consideration:—

"I was first attacked with a severe cold about two years ago, which was accompanied with a troublesome hacking cough, pains at the chest, palpitation of the heart, much feverishness, irregularity of the bowels, and loss of appetite. Blistering, purging, and other means, were employed for some time, but finding no very great relief, I determined upon going to the south eoast, and trying what ehange of air would effect. A few days after my arrival there I was, while in the act of coughing, seized with a violent spitting, or rather vomiting of blood, and brought up full three-quarters of a pint. This formidable attack was shortly subdued, although the expectoration was now and then a little tinged with blood for about a fortnight after. I cannot tell you what remedies were administered, as I was attended by a general practitioner who supplied them himself. Subsequently to this I became gradually weaker and weaker, and sensibly lost flesh. I was then advised to have the opinion of Dr. ——, of London, who visited me, and prescribed tincture of steel, with cod liver oil, and generous diet, but I could not take them beyond a few days, as they caused headache, constipation, flatulence, and general derangement of the digestive. organs. Other remedics being afterwards tried, with no better result, I determined to diseard any further use of them, return home to my family, and see what the vis medicatrix Nature, alias Dame Nature, would do for me. I had no reason for repenting of this decision, for I rapidly gained flesh and strength, which I mainly attributed to the return of a healthy appetite, which had been much interfered with by the constant administration of opiates and expectorants. The cough had ceased during the day, but was oceasionally troublesome early in the morning before rising.

"I remained tolerably well for five months, when, owing to an imprudent exposure to easterly winds, I was again attacked with influenza, attended with a most distressing eough, and acute pain under the left breast, increased action of the heart, and difficulty of breathing. From past experience I was unwilling to undergo what is called 'routine practice,' knowing full well that it was physically impossible for it to reach my complaint; but at the carnest solicitation of my wife and friends, I was at length induced to do so. The treatment which had been employed on previous occasions was

more or less resorted to, and while exasperating my complaint in other ways, was followed up by hemorrhage from the lungs, which brought mo to death's door. When I had recovered from this wretched condition—at least in a measure—I consulted a near relative, an army surgeon, and he very strongly urged me to go to the Capo of Good Hope, where he had been stationed for some years. Although this plan was most inimical to the interests of myself and family in a pecuniary point of view, I adopted my disinterested relative's advice. The voyage there appeared to make a new man of mc-to quite resuscitate me-and encouraged in me a confident hope of complete restoration to health. This pleasing anticipation, however, was of short duration, for after I had landed at Cape Town but a fortnight, the vomiting of blood recurred, although not to so enormous an extent as on the previous oceasions. Added to this some new symptoms arose, including severe diarrhea, night perspirations, and loss of voice, which I attributed to the climate disagreeing with me. And here I may incidentally remark that the latter proved equally detrimental to other pulmonary invalids, with whom I became acquainted; and we all agreed that it is a very mistaken notion on the part of medical men to recommend their patients to this locality, when their disease has made much progress, although probably it may be beneficial to those who only have a predisposition to it. * * * To return from this digression—whilst away from home, and all that was near and dear to mc, and worn down mentally and bodily, I happened to read in a frontier paper, the 'Graaf Reinet Herald,' an account of your mode of treatment by Inhalation. The apparent applicability of your system to my own ease, made so powerful an impression on my mind, that I immediately requested a bookseller to order for me, as speedily as possible, a copy of your work on that subject, and providentially he was enabled to obtain, in the interim, the loan of one which he had previously procured for another party.

I need not say that I read your treatise with intense interest, for every page led me to believe more and more that there was some reasonable hope of my being yet restored to health. With this conviction upon my mind, I summoned up all the moral courage and physical energy that I could eommand, and returned home to England by the first vessel that left the colony. After enduring many perils and dangers, I arrived here yesterday. * * Pray lose no time in seeing me. * * I have sent this very hurried state-

ment for your perusal, as my voice and want of strength will not permit me to hold any long conversation.

" Anxiously awaiting your arrival,

"I am, dear Sir,
"Yours very truly,

"DR. MADDOCK, M.D."

At my interview I found the patient as follows:—He was aged forty-one, married, with three ehildren; all of them healthy. His parents were alive, and they, with the whole of his family, were of particularly robust constitutions, and very long-lived. His countenance was of a death-like leaden hue, tongue furred, pulse 120, loss of appetite, bowels irregular, night perspirations, great emaciation, severe cough, attended with profuse muco-purulent expectoration. Burning sensation in the throat, difficulty of swallowing, and loss of voice.

On auscultation, loud mucous râles were audible over the whole of the left lung anteriorly, with gurgling and pectoriloquy under the elavicle. Inferiorly and posteriorly on this side there was more or less dullness over the whole left region of the ehest, but very eomplete in the subelavieular and supra-seapular portion of it. In the right lung the breath-sounds were quite normal.

The above general and physical signs too clearly demonstrated the existence of very far advanced pulmonary disease. The case was a desperate one, but still it appeared to me as not being beyond all hope, inasmuch as there was no family predisposition to any pulmonary complaint,—a great amount of resistent power to the progress of the disease being even still conspicuously evident in his ease,—and, above all, the important fact of the right lung being perfectly healthy.

The treatment, being of course modified according to circumstances, mainly consisted of inhalations, external applications over the diseased lung, a tonic alkaline mixture, occasional laxatives, with very carefully regulated diet,

clothing, and exercise. Λ belladonna plaister, placed over the region of the heart, was found particularly serviceable in preserving a more tranquil and regular action of that organ, and thus materially aiding in the prevention of hamoptysis.

For a period of six weeks my poor patient made gradual progress; there was an evident improvement in his voice, a slight increase of flesh and strength, and a great diminution of cough, although it was still troublesome, and the expectoration was occasionally specked with blood. At the expiration of fifteen weeks all the more formidable symptoms had nearly ceased. He had gained flesh (being 10 lbs. heavier); the voice was perfectly natural; he rested well at night; scarcely any cough; very little expectoration; and that too, of mere mucus, without any trace of blood; no nocturnal perspiration, appetite and digestion good; and he felt sufficiently strong to take gentle horse exercise. In nine months from the commencement of the treatment, the cavity in the left lung was perfectly healed, and in the right lung there was still not the slightest trace of disease.

Remarks.—My patient should have died, according to orthodox ideas and views, but up to the day of these pages passing through the press, his general health, strength, and appearance are much the same, as I am told by himself and his friends, as that which characterised him before the advent of pulmonary disease.

The worthy admiral informed me that he had long recommended his wife to adopt my mode of practice—seeing that she had derived no benefit from the ordinary remedies—but that she had been dissuaded from doing so by her medical adviser, who assured her that there was no novelty in the system of inhalation,—that he had himself employed it in a similar case,—and found that it did no good whatever.

Contrary, however, to the anticipations of the above practitioner, the inhalations which were resorted to in this case afforded such immediate and substantial relief, that all fcelings of prejudice soon vanished from the mind of the patient, and there was no occasion for persuading her to continue them. Once tried, there is no probability of their being given up:—the nights are passed with so much less restlessness, difficulty of breathing, and cough, and with such an increase of sleep,—the relish for food is so much more markedly felt than when medicines are given by the stomach,—the debility occasioned by the exhausting complaint is so much better borne—that the sufferer soon instinctively feels convinced of the efficacy of his prescriptions, and is generally only too desirous of following them out more frequently than the necessities of the case demand.

After having had one personal consultation, I treated the patient by correspondence, and at the expiration of nine weeks from the commencement of the inhalations I received a letter couched in the following words:—

"January 29, 1852.

"My dear Sir,—I am happy to tell you that I am now quite restored to health, and since I last wrote have had no return of difficulty of breathing. This inestimable boon I attribute (under Providence) to your skilful treatment, and should I have a return of my complaint, I shall esteem myself very fortunate to be so placed as to again have the benefit of your advice. Admiral —— desires his best compliments and grateful thanks, and

"Believe me,
"Yours sincerely and ever obliged,

[&]quot;DR. MADDOCK."

Remarks.—Under the old routine practice, the physician, in attendance upon bronchial cases, has done little more than silently contemplate miseries which it was his province, but not in his power, to relieve. But let us hope a life of greater activity will now be opened up to him by the success which has attended a more rational application of the principles of medicine to the cure of these diseases; once practically acquainted with inhalation, he will discover how very possible it is for the healing art to be retarded in its progress, and limited in its usefulness, by an inveterate devotion and im-

moderate zeal for the usages of the past.

With respect to there being no "novelty" in this mode of treatment, neither myself nor any other physician who is adopting it, lays claim (as previously remarked) to any merit for priority in suggesting the feasibility of inhaling medicines. To inhale is as natural as to swallow, and has probably occurred to the mind of every physician a thousand times. To claim a "new system of inhaling" is as absurd as it would be to claim the discovery of a new system of breathing, or a new passage to the stomach. But it is one thing to know that we can inhale medicines, and another to know what medicines, and in what proportions we should inhale them, to cure disease. The former is within the observation of every one, while the latter can only become known to the physician after long and patient experience. It is not enough that he is well versed in the administration of medicines by Some medicines bear no relation, either in dose or action, when inhaled, to the same medicines exhibited by the stomach. Many medicaments which are so simple in their action when taken into the stomach, that we feel disposed to question whether they be not wholly inert, act with great force when inhaled. Others, again, which are potent in the stomach, are almost without apparent effect in the lungs.

Remembering these facts, it cannot excite any surprise that inhalation should fail in inexperienced hands. The following



case of misdirection of treatment is narrated by a physician who has successfully practised inhalation:—"Recently I was ealled to attend a gentleman suffering from subacute pneumonia, and, after a eareful examination of the state of the lungs, informed him that his was no case for inhalation at that time—in fact, that it would rather do him harm than good. 'But, Doctor,' said he, 'I have been inhaling;' and, on inquiry, to my great astonishment I learned, that the medical man in attendance had actually ordered a highly stimulating inhalation, which he had been using for nearly a week. Of eourse the inflammation had been aggravated, and the patient's life perilled thereby. And let it not be supposed that the physician in question was a mere tyro in practice. He had the advantage of age, a high professional reputation, and now holds a professorship! Now, the eause of the Doetor's error was very simple. A short time previous to the above occurrence I was called to attend a ease which had also been under his eare. The disease was chronic pneumonia, ending in an abseess. He had pronounced the case hopeless, probably from supposing there were also tubercular depositions. This ease rapidly recovered under inhalation, and, doubtless, produced a strong impression on his mind. In the second ease he was determined to be the first to propose inhalation, and the experiment nearly eost his patient's life."

Case XLI. Bronchitis.—In the year 1859 I was requested to visit General ——— at Paris, who, being compelled to return from India invalided, had been induced to try the climate of France, which on former occasions was found very beneficial to him.

I found the General suffering under very aggravated and long-standing bronehial disease, associated with much functional derangement of the biliary and digestive organs, the combined effects of which had quite prostrated him.

Balsamie and chlorine inhalations, with the internal administration of Ext. Taraxaci, Acidi Nitrici, Tinet. Lupuli, &c. &c., were the remedial means which were chiefly employed;

and so prompt and effectual did they prove in their action, that I had the happiness of hearing from the General, in a fortnight's time after their adoption, that all the more urgent symptoms had been ameliorated—so much so that he now entertained "a confident hope of recovery, of which he had before quite despaired." Two months subsequently to this favourable account, he returned to this country in comparatively good health.

Case XLII. Simple Cough.—The Rev. Dr. ——, an eminent theologian, addressed me as follows:—

"I have read your work on Affections of the Chest, and having lost some near relatives from consumption, am desirous that you should examine my chest, and tell me whether there are any indications of pulmonary disease. I have scarcely anything to complain of beyond a trifling cough, attended with a tickling sensation in the throat, and a slight discharge from the nose; but still am anxious, for the reasons assigned, of having the benefit of a consultation with you." * *

Mild astringents were prescribed, to be inhaled for ten minutes every night and morning—the patient being directed to exhale through the nostrils. By these means the mueous surfaces of the bronchial tubes, and the nasal membrane, were simultaneously and directly acted on, and the irritation which had existed in these parts was speedily and effectually removed.

It appeared that the reverend gentleman had previously eonsulted a distinguished physician, who (I believe from a physical ineapacity of discerning morbid from healthy sounds) had pronounced the ease to be incipient phthisis; but after instituting a minute examination of the thorax by the stethoscope and percussion—testing the vital capacity of the lungs by the spirometer—and subjecting the sputum to the all-revealing power of the microscope, I felt much gratified in being enabled to confidently assure him that there were no physical signs whatever of the existence of organic disease of the substance of the lungs. This satisfactory account appeared to relieve his mind from a great load of anxiety. It was in June, 1851, that the consultation took place, and the

correctness of my diagnosis has been confirmed by the fact of the patient now being in the enjoyment of robust health.

Remarks.—The circumstances connected with the above case prompt me to make a few incidental observations on the means of diagnosis in pulmonary and other diseases of the thorax.

It would, of course, be foreign to the object of this work, and incompatible with its assigned limits, to enter minutely into the various and delicate sounds which indicate different diseases of the lungs and heart, and it is also difficult to render intelligible by words the special character of the sounds elicited from a healthy or diseased chest; but I may generally remark that the respiratory murmur, which in a state of health is scarcely audible, becomes, in tuberculous disease, more distinct, the voice more resonant, and the sound produced by percussion, duller. These alterations in the respiration, and in the signs elicited by percussion, take place from the summit to the base of the chest, and are most frequently confined to the superior lobes of the lungs on one side, where the development of tubercles usually first takes place. In bronchitis, with which consumption is sometimes confounded, the morbid sounds proceed from fluid in the bronchial tubes, and not from an increased density in the lungs; and, unlike consumption, they are generally discovered at the inferior part of the chest, and usually at both sides. The physical signs which denote suppuration in the latter stages of consumption, consist in the superior parts of the chest being dull on percussion, accompanied by a hollow, coarse respiration, giving rise to a peculiar phenomenon, called pectoriloguy, which is said to exist when the voice is heard through the stethoscope applied to the chest, and sometimes by a tinkling echo, or metallic ringing. Should there be much fluid in the lungs, arising from impeded respiration, a mucous râle, or rattle, which has been compared to the sound caused by blowing through a pipe into soapy water, is then perceived over the diseased parts. When the air passes

through the cavities, a peculiar cavernous respiration is heard, induced by the passage of air from the bronchial tubes into the cavities, instead of entering the minute air-cells. demonstrate the presence of tubercular disease, the physical signs must exist collectively, and be accompanied by those general symptoms which I have described in the previous cases.

The information to be acquired relative to the condition of internal organs in general is necessarily very limited; but by the aid of anscultation and percussion the practitioner is enabled to obtain direct symptoms of thoracic diseases, in respect of their nature, origin, and condition, which are almost as infallible as those derived from actual sight: and he is thereby enabled to steer his course through those numerous difficulties and uncertainties which would otherwise embarrass and perplex him if attention were wholly directed to functional derangement.

Although the various changes in the texture and functions of the lungs and heart are capable of being detected with such wonderful certainty, yet, it is evident that the power of discovery must belong to those only who have, by physiological and pathological investigation, added to considerable practice and close observation, made themselves acquainted with their formation, progress, and results. For it is not sufficient that certain sounds be communicated to the ear, that disease will be detected—the mind must be made familiar with the objects from which they proceed, and the ear must be musical, and well tutored, to be capable of discriminating the real nature of them.

How important then it is that the chests of those who have reason to apprehend the existence of pulmonary disease should be occasionally examined by a competent physician by one of acknowledged superiority in this branch of his profession! Relative to this point I quote the following paragraphs from an article which appeared in a medical journal on the subject of Auscultation :-

"Those who know themselves to be exposed to the chances of pulmonary disease cannot be too jealous in the watch they keep over the earliest perceptible signs of its approach. Let it not be forgotten that, in its early stages, Phthisis is as amenable to treatment and as curable as any other form of disease. We cannot, therefore, know too soon if we are the subjects of it; and how is this to be ascertained but by a most thorough and careful examination into the rational or constitutional, and physical or local, symptoms and signs of the disease? If we are sound and healthy, an examination cannot give us disease of the lungs—if we are diseased, the sooner we know it the better, for the treatment cannot be too

prompt.

"Every one at all predisposed to pulmonary disease ought to be oceasionally examined during the year, and perhaps there are no periods better suited for this investigation, than the broken weather of autumn and spring, when its seeds are so often sown and developed. It is almost superfluous to add that this examination should be made by some physician well practised in the various methods of examination, and experienced in pulmonary affections. It requires a nice, acute ear, well educated for the purpose, to distinguish slight departures from the normal or healthy condition of the respiratory sounds, and a well-practised eye to mark the deviations from the proper configuration and relative proportions of the ehest, and the character and extent of its movements as influenced by disease. There are some practitioners who possess the happy faculty of easily distinguishing the charaeter of the respiratory sounds, and detecting slight irregularities or deficiencies in them; but there are many, alas! for whom it is as impossible to apprehend these niecties, and master this means of diagnosis, as it is for a large number of people to understand and appreciate all the higher sentiment conveyed in the changing harmonies of Mozart or Beethoven. Nor, indeed, with the best natural endowments of the faculty of hearing, can this knowledge and power be attained without the experience which only very many years of practice, on a large number of eases, will confer."

The truth and force of these remarks will be readily admitted. It is a melancholy fact that among the class of practitioners spoken of, there are those who lack the experience and ability so requisite to be employed, in making an exploration of the chest for the purpose of discovering its true

condition. Could their incompetency be always made apparent, it would not be too much for invalids to address them in the language of Hamlet to Guilderstern, when the latter expresses his want of skill to play upon a "pipe" which the former tells him will "discourse most eloquent music:"—

"Why, look you now, how unworthy a thing you make of me. You would play upon me: you would seem to know my stops; you would pluek out the heart of my mystery; you would sound me from my lowest note to the top of my compass: and there is much music, excellent voice, in this little organ; yet cannot you make it speak? Do! Do you think that I am easier to be played on than a pipo? Call me what instrument you will, though you can fret me, you cannot play upon me."

The Spirometer and the Achromatic Microscope, to which I have already alluded, are very important additions to our means of ascertaining the power of the lungs under different eircumstances and conditions, and obtaining unerring evidence as to the true character of the sputum. These invaluable instruments are among the greatest boons ever presented to the medical profession, in modern times; without their aid, indeed, no man can be considered a safe or successful practitioner.

Mr. Hutchinson, the inventor of the Spirometer, gives the following interesting table (see opposite page) of the comparative respiratory functions in pulmonary consumption and in health.

Case XLIII. Hay-Asthma.—A dignitary of the Church, residing in Surrey, had been a sufferer from this curious complaint for several years past during the hay season. The only way in which he could obtain relief, was by changing his residence from inland to the coast, Brighton. Having heard of my mode of treating such cases, he was induced to seek my advice. His symptoms were inflammation of the mucous membrane of the nose, long-continued paroxysms of violent sneezing, with irritation about the eyes, throat, and air-passages, showing thereby that the larynx and lining of

EARLY STAGE.		ADVANCED STAGE.	
EARLY Vital Capacity. Discused. Cubic inches. 113 115 105 130 128 120 100 140 100 110 136 135	Vital Capacity. Healthy. Cuble inches. 220 173 173 204 220 229 193 246 204 220 229 229 204	ADVANCE Vital Capacity. Diseased. Cubic inches. 59 89 108 72 80 75 34 171 60	Cubic inches. 135 224 254 135 229 254 246 270 237
192 225 145 200 185 218 129 344 220 196	230 300 220 240 230 240 220 434 260 254		

the windpipe were involved. There was also a great deal of wheezing and sense of suffocation at the chest—hence the name Hay-Asthma. The tonsils were slightly inflamed. With the exception of some feverishness, there was no indication of much general constitutional derangement; and believing as I did that the affection arose from, and was maintained, by a local condition, and that no real good could be accomplished by sending remedies (as had been previously done) with a blind mission through the stomach, I adopted soothing and astringent inhalations, with directions that the patient should be particular to exhale through the nostrils. Insufflations also of Argent. Nitrat. were resorted to; the applications of which, unlike that of a probang, if properly used, are not attended with the least possible risk or inconvenience.

By these means the symptoms were quickly overcome, and future attacks prevented.

Remarks.—The attention of the profession was first directed to this species of asthma by my respected friend the late Dr. Bostock, who was a martyr to it. It is not unfrequently met with during the months of June and July, and appears to be eaused by inhaling the pollen of some kind of flowers or grass which are at maturity at that period of the year. It may also be produced long after the hay season is over, by simply going into a barn where hay is stored, or by having hay brought to a stable near the house.

Case XLIV. Consumption.—In the year 1852, a young lady, aged 18 years, was brought to me for consultation by her parents, who stated, with feelings of great emotion, that they had lost all their other children (three in number) from consumption. Notwithstanding they were now advised (as they unfortunately had been in the former instances) that medicinal treatment was useless, and that a change to a foreign climate was the only chance of prolonging life, they had determined upon keeping her at home—in accordance, too, with the expressed wishes of the patient herself—and trying my mode of treatment. They were the more induced to adopt this plan from the circumstance of my having successfully treated the case of a former schoolfellow, and friend of their child.

The patient had now a pallid appearance with occasional hectic flushes. The respiration was oppressed and hurried; the action of the heart much accelerated; pulse 120; animal heat, 102°; tongue coated and unnaturally red at the sides; little or no appetite; want of rest at night; bowels sometimes loose and sometimes constipated; catamenia suspended; profuse expectoration, occasionally streaked with blood; nocturnal perspirations; great emaciation, attended with so much loss of strength that she was obliged to be lifted out from the carriage.

The physical signs were as follows:—Defective motion and

dulness over the superior half of the right lung, with a combination of gurgling and pectoriloquy. The infra-clavicular spaces were flat and hollow on both sides.

An examination of the sputum by a powerful acromatic microscope unerringly showed that it contained tuberculous matter; and the existence of a cavity, as had been previously pronounced by her former physicians, was incontrovertible.

In reply to the inquiries of the patient's relatives, I informed them that the case was of a truly formidable nature and the result doubtful; but that I would not hesitate to undertake the management of it, knowing as I did, that a recovery, even under such unfavourable circumstances, was by no means of rare occurrence. With respect to her proposed removal to a foreign climate in her present precarious condition of health, I considered it to be a cruel, unwise, and most reprehensible measure.

Without entering into unnecessary minute details—suffice it to say that, for the local affection of the lungs, I prescribed local remedies—inhalations of chlorinc in combination with sedatives; and for the improvement of the general health, occasional alteratives, laxatives, tonics (chiefly composed of steel and quinine), with strict hygienic discipline, and such other means as appeared to be most appropriate to meet the varying conditions of the constitution.

Although there were many drawbacks and barriers to progress, caused by catching fresh colds, domestic affliction (including the sudden death of a near and dear relative from disease of the heart), and other discouraging circumstances, a most marked improvement in her appearance and health was speedily accomplished. After a steady and faithful perseverance in the treatment for sixty-three days, I find the following entry made in my Case Book:—" Nov. 22, '52. Miss —— visited me; having walked from Eaton Square. The improvement in this case has equalled, if not exceeded, my most sanguine expectations. She has now no cough; her appetite has improved; the night perspirations have wholly

eeased; gained 14 pounds in weight; pulse 85; ean count thirty without taking a breath; marked 137 on the spirometer; animal heat 98°."

The case continued to progress favourably, and the ultimate termination of it is thus recorded in my Diary:—" Miss ——'s case. January 10, '53. This patient, by her perseverance, energy, and resolution, has nobly seconded my efforts, and she has received her reward—she is now perfectly recovered. The chest, which was formerly flattened, is materially expanded and well developed. The right lung presents all the signs of entire cieatrisation."

I subsequently heard from the lady as follows:—"My health in every respect—thanks to your skill and unremitting attention, aided by the Divine blessing—is in as satisfactory a condition as I could well wish it to be."

REMARKS.—It is not possible to coneeive a more pointblank case than the foregoing presents of recovery from a very advanced stage of tuberculous disease, with perfect restoration of the general health.

Case XLV. Consumption.—In May, 1852. I professionally visited a lady, ætat. 28, the wife of a manufacturer in Staffordshire. She had been suffering for nine months from cough, attended with muco-purulent expectoration occasionally tinged with blood, general debility, irregularity of periodical health, and loss of appetite. I was told by her husband, that in eonsequence of having favourably heard of my mode of treatment by inhalation, he had suggested to the medical attendant some months previously that she should personally eonsult with me; but the gentleman eonsidered that it was quite unnecessary that she should be subjected to so long a journey, inasmuch as he was well acquainted with my remedy, and both willing and able to employ it himself. Under such eireumstances the contemplated visit was abandoned, and "my remedy" was then resorted to; but instead of mitigating the symptoms, it greatly augmented them. The spitting of blood increased from a few drops to

more than a tablespoonful per diem; there was also accession of fever, palpitation of the heart, with a feeling of constriction over the whole chest, and difficulty of breathing. The tongue was coated with a yellowish fur, with raised papille. The secretions were irregularly acted upon and vitiated, the motions assuming a clay-like appearance, and the urine depositing a lateritious and mucous sediment. Upon hearing the dose and form of the powerful medicament, which had been mixed with boiling water and used in a most rude and unappropriate apparatus, the real cause of this alarming aggravation of the poor lady's symptoms was but too painfully manifest.

By percussion and auscultation I discovered much bronchial irritation, combined with imperfect respiration in the summit of the left lung, and a general dulness of sound; but the physical signs were not so unfavourable as the general symptoms had led me to anticipate.

By a carefully regulated course of treatment by inhalation, and directing an anxious attention to the improvement of the general health by the cautious administration of alteratives, followed up by tonics, chiefly Ferri Citratis, c. Ol. Jecur. Aselli, the patient got quite well, and has remained so. Although I cannot regard this as a case of advanced phthisis, yet I have little doubt that, under ordinary treatment, it would have followed the usual course of the disease, and have sooner or later proved fatal.

Remarks.—The peculiar circumstances connected with the above case, demand that I should explain that by Inhalation is not meant a particular remedy, but a particular method of practice consisting of many remedies. That is to say, the medicines inhaled for the cure of consumption are not alike in all cases, nor in all stages of the same case; for similar trains of symptoms at its different periods, we shall find, require different, and sometimes even opposite, means of cure. Inhaled medicines are adapted to the condition of the lungs, in the same manner that we adapt those given by the stomach

to the object to be accomplished by their use. We may swallow a purgative, an emetic, or an opiate, and though all are taken in the same manner and pass into the same organ, yet each produces a different effect. So is it with inhaled medicines. We prescribe one inhalation to soothe the lungs, another to expectorate the lungs, a third to stimulate the lungs, a fourth to promote absorption of tubercle, a fifth to astringe the mucous membrane, a sixth to allay spasm in the air-passages; and of each of these kinds a hundred different forms are made by increasing or diminishing the proportions of the ingredients of which they are composed, or by the substitution of other ingredients of the same class. Inhalation, then, as a practice, is a complicated system. Its principles are simple, but its practical adaptation to the cure of disease of necessity most intricate.

Case XLVI. Consumption.—A gentleman, aged 29, a member of a mercantile firm in the City, of an exsanguined appearance and naturally nervons and somewhat impetuous constitution, applied to me for advice in the summer of 1858. He was suffering from extreme debility, chronic cough, difficulty of breathing, and wandering pains at the chest, extending up to the shoulders. The pulse was languid; the tongue furred; animal heat 97°. Below the right clavicle there was dullness upon percussion, and on the application of the stethoscope some sibilant râle was audible, and the respiration had a bronchial character. The sputum was opaque, abundant, and fell to the bottom when placed in water. His disorder had been described by his former physician as "pulmonary phthisis," and there could be no doubt of the correctness of this opinion.

Inhalations composed of Sol. Chlorinii Sat., with Suc. Conii, counter-irritants (but without actual blistering), gentle alteratives, followed up by tonics containing Ferri Sulphatis, Quinæ Disulph., &c., were employed in this case, and with such marked benefit that the patient considered himself quite well at the termination of six weeks; and no persua-

sion, either on the part of myself or his friends, would induce him to longer continue any medicinal treatment, and he started forthwith on a pleasure trip to Paris. It appeared to me that he made a grievous error in acting thus, for his case was one of those in which the tubercular matter seemed to be undergoing some cretaceous transformation which would probably have led to his entire recovery.

I did not hear anything further from the gentleman for upwards of six months, when I received a letter from his father stating that his son had returned home in a sad state of

health, and was desirous of immediately seeing me.

I found the poor fellow greatly altered in appearance since I last met him; in fact, a mere shadow of his former self. He told me that when he arrived in Paris, he felt as well and as strong as he ever had done; but subsequently, having led a "fast life," and suffered from many of its concomitant evils, his health suddenly declined, so much so as to render him unable to leave his bedroom for several weeks. The physical signs now denoting that both lungs were nearly disorganized, and the general symptoms showing that there was not one function of the whole system properly performed, the possibility of a recovery was, of course, out of the question; and so my misguided, but naturally amiable and generous-hearted young friend, sank into a premature grave.

Although the case had a fatal termination, I feel well confident that had this patient faithfully carried out the treatment, and taken all due care of himself, his term of life might have been greatly prolonged, and with the enjoyment of average good health. He should have remem-

bered,—

"How poor are they that have not patience!
What wound did ever heal but by degrees?
Thou know'st we work by means and not by magie,
And means depend on dilatory time."

All persons who are uninformed as to the simplest facts relating to disease, its nature, progress, and cure, do not

sufficiently realize the essential difference between the cure of chronic—or those diseases which have been slow in establishing themselves in the system, and frequently involve a eonsiderable extent of an organ or tissue before they manifest any very striking characteristic symptom—and those acute diseases, such as fever or inflammation of only a few days' standing; and are hence apt to expect from inhalation results entirely beyond the reach of attainment. One or two months seem to them to be time ample enough to break up a disease, which has been establishing itself in the system for years, and which has already linked together all the organs of the body in a chain of complications and sympathies, many of which are actually more intractable than the original disease. This disposition to expect rapid eure is the extreme of folly, and ean only lead those who indulge in it to mortification and disappointment. Chronic diseases cannot be broken up in this summary manner. They require to be earefully studied, and the mode of treatment must be persevered in for a length of time, the remedies being occasionally, and sometimes frequently, varied and modified in order to meet the conditions occasioned by gradual changes in the system, and developed by the progress of the cure.

CASE XLVII. CHRONIC BRONCHITIS.—The wife of a merehant residing in Liverpool, wrote to me thus in the year 1853:—

"After having perused your work on Diseases of the Chest, I am very anxious to ascertain whether you think your treatment applicable to my son's case, of which the following are the symptoms:—He is six years old, very pale, slightly made, and is suffering, I am told, from Chronic Bronchitis. At the time of his birth, and until nearly four years old, he was a remarkably healthy child, but since then he has been subject to the most painful and distressing attacks of difficulty of breathing—in which his countenance becomes anxious, his eyes appear as if starting from the sockets, his lips are livid, and it sometimes really seems as if every breath would be his last. The only thing that appears to relieve him is large doses of ipecacuanha, which cause expectora-

tion of a mueous substance, that I can only compare to the white of an egg. He requires also to have his system aeted on at the same time, as he is a bilious child. His appetite, however, is always good, and he feeds quickly, no matter what his diet. Our family doctor has given him powders of ealomel and rhubarb; he has also tried, at various times, leeching, blistering, hot baths, and mustard plaisters—also strong coffee; but notwithstanding the adoption of these and other means, the difficulty of breathing remains greater than ever, and his general health has lately materially deteriorated. I fear that the prospect of the dear boy's recovery is very remote, but should the results of your extended experience lead you to entertain the opinion, that your mode of treatment by inhalation (of which I have read with so much pleasure and interest), is calculated to substantially relieve him (for he has scarcely slept at all for the last four nights), I shall be truly thankful if you will give us your immediate attendance."

I visited the little patient, and put him on the same plan of treatment, by inhalation, as detailed in previous cases, and in about seven weeks he had perfectly recovered from the bronchial complaint, and was materially improved in his general health. The following gratifying communication, which I subsequently received from the mother of the child, gives the termination of the case:—

"Mr. —— requests me to ask you at what hour on Wednesday or Thursday next it will be most convenient for you to receive him, as he wishes to consult you regarding his chest, from which you may perhaps remember I mentioned to you, when at Liverpool, he has felt inconvenienced for many years: indeed, I do not think my husband's breathing has been free from difficulty, for eighteen years.

"My dear boy has been perfectly well, and I have used no remedies of any kind for him, for three months. Within the last fortnight he has been eoughing with what I think is whooping-eough, as three of the younger children have it, but notwithstanding this trial, it is impossible that his breathing eould be more free, or natural."

Case XLVIII. Consumption.—In the year 1853, the following letter was addressed to me:—

" Manchester.

"My DEAR DOCTOR,—I have repeatedly heard of, and once personally observed (in the ease of my mother, whom you attended for a severe attack of bronchitis), the efficacy of your admirable system of treating diseases of the lungs, by medicated inhalations.

"I am now very anxious that you should visit, with as little delay as possible, my dear wife, who is suffering under consumption, and whose recovery is pronounced by our medical attendant as beyond all hope. This opinion may be correct, but witnessing her daily get worse, without any real effort being made in a eurative point of view, my eonseience dietates to me that I should no longer remain supine, but ascertain from you whether your mode of practice holds out the slightest hope of the restoration of her, who is all in all to me. I have not yet mentioned to Mr. ———, our medical attendant, the fact of my having written to you, for I know perfectly well that he will say that it is quite useless to do so; he is one of those practitioners who maintain that consumption, when once established, is never remediable. * * * I only regret that the distance and jealous interference of others (of which I will explain more when we meet) should have eaused me to so long delay in making my present request.

"Yours faithfully,

The lady above referred to was aged twenty-five, the wife of a merchant, with two children. I found her suffering under a distressing cough, attended with profuse expectoration of purulent matter, mixed with blood, night perspirations, hectic flush, and the general outward indications of confirmed tuberculous disease. A minute stethoscopical examination denoted that the right lung was sound, but the cavernous rhoncus and pectoriloquy distinctly audible at the summit of the left lung proved the existence of a cavity in that part.

Without entering into minutiæ it is only necessary to say that in this case (in which I took, from various circumstances, no ordinary interest) so greatly were the symptoms ameliorated by a course of inhalations, that the lady was enabled in seven weeks' time to be removed to the residence of her mother-in-law (a former patient), which was at that time in

the neighbourhood of London. At the expiration of about ten months from the commencement of the treatment the cavity had perfectly cicatrised—to use a popular term, "dried up,"—and to this day she not only lives, but enjoys life, and is quite equal to the increased duties required of a mother of *five* children.

Remarks.—This is another example showing how after tubercles have been deposited, and a cavity formed, there is still a possibility of a perfect recovery. By appropriate inhalations the absorbents can be roused up, and stimulated, so as to cause them to remove the former, and if the cavity, as happened in the above instance, be surrounded by healthy lung, can promote its cicatrisation and healing, in the same manner as an external scrofulous abscess may be healed under direct local and general remedics.

With respect to the assertion made by the former medical attendant of this patient, that "consumption, when once established, is never remediable," I would respectfully direct the attention of that gentleman, and of others who entertain such an erroncous opinion, to the facts and arguments previously adduced by me (vide p. 3, et seq.) in support of the positive assertion of Andial that "Pulmonary phthisis may terminate favourably in three ways: either by the absorption of the tuberculous matter, or by the change of this matter into a calcareous substance, or by the cicatrisation of cavities."—(Clinique Médicale.)

Case XLIX. Consumption.—In the year 1840 I attended the Hon. Mr. ——, in conjunction with the late Dr. Paris, President of the London College of Physicians. The patient was suffering under great loss of strength and flesh, excessive nocturnal perspirations, palpitation of the heart, incessant cough, with profuse expectorations of sanguineous purulent matter. There was much functional derangement of the biliary and digestive organs. He was also occasionally subject to fits of great mental excitement and despondency. A stethoscopical examination was made by Dr. Paris and myself,

and we both agreed that there was incontrovertible evidence of the existence of a cavity in the summit of the right lung. Dr. Paris gave his opinion that the case was irremediable, but, in accordance with my wishes, readily assented to the adoption of medicated inhalations, and assured me that the treatment should meet with his hearty co-operation in every respect, and that nobody would be more rejoiced than himself to find that his unfavourable prognosis was not verified.

The treatment consisted of inhalations of astringents and sedatives, followed up by those containing iodine; external counter-irritants and appropriate alteratives and laxatives to meet the general constitutional symptoms.

The more formidable symptoms were soon abated, but not so quickly as they might have been, owing to the patient having frequently discontinued the remedies when any decided amelioration had been experienced. In despite, however, of these and some other drawbacks connected with his habits of life, at the termination of fifteen weeks from the commencement of the treatment he was pronounced by Dr. Paris and myself as convalescent, and he shortly afterwards was in as good bodily health as he had ever been, and he still remains so, but is unfortunately labouring under hereditary mental disease.

My respected colleague watched with great interest the effects of the inhalations, and from time to time expressed his entire approval of this plan of treatment, and strongly urged me to strenuously persevere with some important inquiries and investigations I was then making in connection with this interesting study. It was, I believe, partly in consequence of the successful termination of the above case, that Dr. Paris was induced to make allusion to the subject of Inhalation in his 'Pharmacology' (vide p. 13, ante). Although no amount of assertion, even should it proceed from the most able and experienced authorities, can possibly subvert the evidence of the value of medicated inhalations, yet it is always satisfactory to find that my own views and opinions are sanctioned by so great a man as that just referred to.

Case L. Consumption.—A county magistrate, residing in North Wales, aged forty-seven, married, with several children, of a consumptive family and very nervous temperament, came to town, for the purpose of placing himself under my care, in the year 1851.

The symptoms of this gentleman, as registered by me at the time of consultation, were as follows:-Has complained of cough for nine months, and it is now almost incessant, and attended with difficult expectoration, especially in the early part of the morning, of tenacious muco-purulent matter. Great relaxation of, and tickling sensation at the back of the throat, with hoarseness of voice. Has materially lost flesh and strength, and is occasionally subject to night perspirations and diarrhea. Rapid action of the heart, and great difficulty of breathing. Can only count fourteen without taking a breath. Vital capacity of the lungs, as evidenced by the spirometer, 96 cubic inches. Pulse, 110. Animal heat, 99°. Tongue coated, and appetite indifferent. Wandering rheumatic pains, especially about the knees and shoulders. examining the thorax by the stethoscope, and by percussion, I detected prolonged expiration in the left lung, and coarse mucous râles at the right lung, both behind and before, with solidification of its apex. In a private conference with the wife (a most intelligent lady) of this patient, I was told that he was dreadfully depressed in mind, and had been daily getting worse in consequence of having been recently informed by his physician that his disease was incurable.

Under such circumstances, it was my first and earnest desire to inspire the patient with a feeling of confidence as to the efficacy of my mode of treatment (which I fully accomplished), and I assured him—which I could do in all truth and sincerity—that there was a fair chance of his recovery. I recommended him to live near the Great Exhibition (in which he took a lively interest), in order that he might constantly amuse himself, and thus withdraw his mind from those gloomy fears, which had so tormented and dejected him.

I prescribed inhalations, cod-liver oil, lunar caustic applications to the fauces, accompanied with tonics, and strict hygienic rules. In the course of a fortnight the more urgent symptoms were materially ameliorated. At the termination of nine weeks, all traces of solidification had disappeared from the right lung—the pulse had gradually come down to 80—there was a great increase in the vital capacity of the chest—he had gained 13½ lbs. in weight, and the respiration was natural. Shortly afterwards he returned home quite well, to the delight of his private, and astonishment of his medical, friends—and has, at the present time, no indications of pulmonary disease.

Remarks.—The facts connected with this gratifying example of recovery, induce me to observe that when the mental energies are depressed by anxiety, fear, &c., the powers of life are far less able to oppose the effects of pulmonary and other exhausting diseases. The manner and bearing of the physician, when calculated to inspire confidence, will, of themselves, accomplish not a little in fulfilling the intentions of his prescriptions—and hence the necessity of his exhibiting indications of this kind, in cases of danger and depression. There cannot be a doubt, indeed, that Hope, in whatever form it may be excited, is a most powerful agent in combating this, and in fact every class of ailments; while its opposite, Despondency, is one of the greatest evils we can have to contend with.

As pertinent to this subject, I may here introduce a portion of a very humorous but suggestive article which originally appeared in the 'Medical Times and Gazette.'—An attorney, after describing to a friend (whom he accidentally met in Regent Street), that he had been suffering from "influenza," and all the consequences of that debilitating complaint, goes on to say:—

"So, while things were in this plight, and I could plainly see that my friends felt very shaky about me, and one was advising me to call in Doctor This, and another Doctor That, at last, as a

satisfaction to my family, and also to see if I could get some relief. I went one morning with my wife, without saying a word to old Dulph, to consult the great Dr. Cæruleus Mortisago, Physician to St. Lazarus's Infirmary for Diseases of the Windpipe, Fellow of a dozen Societies, Professor of Mortal Pathology, or something of the sort, at the Collegiate School of Medicine, and altogether a medical gun of the greatest possible calibre. Well, sir, I was stripped, and weighed, and measured, and tapped, and rapped, till my ribs ached; I was made to gasp, and breathe, and cough, and count; every inch of me was explored; but I could plainly see that the more I was explored, the worso was the Doetor's opinion of my ease. At last, when he had finished his investigation, we asked him anxiously what he thought. And I seareely ean fancy a poor wretch at the Old Bailey looking more anxiously in the foreman's face when he comes in to deliver the verdiet of the jury, than I did at the face of Dr. Cæruleus Mortisage, in order to antieipate what his verdiet would be. As for my poor wife, sho trembled so, that I thought she would have dropped off her chair.

"However, after a short preamble, the opinion was delivered, ealmly, and not unkindly; but it was very positive, and unfavourable enough in all conscience. He told me a good deal which I could not understand, about congestion, or consolidation, or something of that sort, but said it was his duty to tell me that he considered my case a bad one; he believed I should not be able to go on with my usual pursuits, and hinted at the expediency of parting with my share in the business, and retiring to Bournemouth or Hastings. He spoke long and kindly, but all to the same purpose, and took no great pains to conceal the fact that he thought me a dead atterney.

"Just as we were going (for I had paid him his fee) it struck me that something was missing, I could searcely recollect what, so stunned was I at the sentence that had been passed on me, till my wife said, 'Are you not going to give us any prescription, Dr. Mortisage?'

"The question seemed to strike him all of a heap, for he had evidently forgotten this part of his office; but he took up his pen and wrote something which he gave me, and we left.

"So soon as we got into our earriage, and I could collect my thoughts a little, my anger knew no bounds. Here is this raseal, I said, pronouncing sentence of death on me; and searcely thinking it worth his while to write a prescription; what good can

such a man's treatment do me? He begins with the notion that treatment is of no use, and when that is the case, what good is he likely to. So I tore the prescription into fifty pieces, and threw them out of the window. If I am to die, I said, be it so; but I'll have a good stand-up fight for life first of all. So, back I went to old Dulph, who gave me lots of tonic draughts; then I went to stay with my wife's aunt in the country, an uncommon old lady for feeding one up; and then I found out that things at the office were not so bad as I feared; in fact, if I had fretted less, they never would have seemed so bad, nor have been so bad, and everything went on very well without me, till, after about six months of care, and nursing, and change, I got better, and here you see I am, not a bit like a dying man. The next time I am ill, depend on it I won't go to any of these ominous death-tic fellows. If I had not been a strong-minded man, I should have died of fright. When I am ill next, I'll choose a man who has a heart under his waistcoat; one who don't look upon his patient merely as a mass of decayed lungs or arteries, or what not, but who will put a little heart and soul into the work of cure, who will fan one's hopes and desires of life, and so feed the flame, instead of putting a wet blanket upon it, and seeming as if his whole soul were bent upon a post-mortem examination. For my part, I never meet Mortisage in society without a kind of awkwardness; I feel somehow as if my being alive and walking about was a sort of standing imputation on his skill in diagnosis; this feeling quite haunts me, and I sometimes wonder whether a physician could not bring an action against a man, for obstinately, pertinaciously, and offensively living on from year to year in spite of the clearest and most scientific evidence that he ought to have died long ago."

Thus far the loquacious and provoked attorney had spoken, when the friends parted with mutual salutations.

In spite of the apparent exaggeration of some of these statements, they might usefully furnish food for reflection to my readers. Certain it is, that the profession is quite conscious of the existence of a class of practitioners—and society is not quite ignorant of it either—who are too apt to look on human beings as mere objects; who, in cultivating the art of distinguishing diseases with the greatest possible accuracy, ARE NOT EQUALLY STUDIOUS OF THE MEANS OF CURING THEM; who

regard physical alterations of structure, to the neglect of that vital force which overrules the whole machine; and who, above all, practise in a hard, cold spirit, without exhibiting anything positively wrong, or inhuman, or unkind, but yet without the sympathy, the heartiness, as it were, requisite for genial and successful influence upon man in his entire nature. This is the fault which leads them to be ready rather to fore-tell impending mischief than to prevent it; and it is most curious to observe how prevalent the custom of giving hopeless but wrong prognoses has been, in the case of diseases of these very organs, the accurate diagnosis of which is among the greatest triumphs of modern medicine.

There are few, perhaps, who cannot call to mind some condemned case of phthisis, or of disease of the heart, in which the sufferer has continued to live out his time, in defiance of mortal diagnosis. The moral we would draw is, the necessity of caution in all cases in giving opinions which exclude all hopes of recovery, and of never neglecting, in an apparently incurable malady, such treatment as would be most likely to preserve life, if the case admitted of recovery.



INDEX.

AMERICA, employment of inhalations in, 9, 16, 17.	
Andral's writings, reference to, 7, 113.	
Aphonia, 55, 68, 74.	
Asthma, cases, 57-8, 61-3.	
, acute sufferings in, 57.	
———, Hay, 102-4.	
Auscultation, importance of, 99-102.	
Bell, Sir Charles, quoted, 81-7.	
Bennett, Dr., quoted, 5.	
Blood-letting, injurious results of, 36, 42-3.	
——, spitting of, 40, 64-5.	
Bronchitis, cases, 45-53, 87, 94-7, 110.	
Carpenter, Dr., on inhalation, 10-11.	
Carswell, Dr., quoted, 6.	
atarrh, mucous, simulating consumption, case, 66.	
Uhest, occasional examination of, how necessary, 99-102.	
Chlorine, 26-8, 35.	
, inhalation of, introduced by M. Gannal, 26.	
———, Dr. Cottcreau's remarks on, 27-8.	0.79
, cases successfully treated by, 33, 38, 41, 53, 56, 59, 66 105.	, 67,
Clergyman's sore throat, 68-74.	
Cod-liver-oil, its real benefit, 75-7.	
Consumption, early symptoms of, 50-2.	
————, distressing sufferings in, 44-5.	
——————————————————————————————————————	
, physical signs of, 99.	
, often fatal, under any mode of treatment, 2-3.	
, may be cured, and how, 3-31.	
, its identity with serofula, 24.	
К	

Cough, common, too often neglected, 51. ———————————————————————————————————	
Debilitating measures always, if possible, to be avoided, 43. Delpit quoted, 12. Despondency, mental, how inimical to recovery, 116. Digestive functions, their influence on the heart, lungs, and other organs 81-7. Dry cupping, 38.	5,
Effusion of fluid into the pleura and heart, 63.	
Green's, Dr., prefatory remarks to American edition, ix.	
Harwood, Dr., quotations from, 19, 71. Hæmoptysis, remarks on, 40, 64-5. Habits, pernicious, 47-8. Health, physical and moral, their connexion, 47-8. Heart, affections of, 60-1. Hope, the beneficial effects of, 67, 116.	
Influenza, chronic cough after, 49. Inhalation, medicated, no novelty, 96. ———————————————————————————————————	f
administration, 30, 68, 96-7, 107-8. ———————————————————————————————————	
————, general conclusions respecting, 29. —————, juices, medicinal, preferable to tinetures in, 68. Inhalers, common, very defective, 33. Iodinc, inhalation of, its decided curative effects, 20-6. ———————————————————————————————————	٠
Johnson, James, Dr., quoted, 47. Juices, medicinal, preferable to tinctures in inhalations, 68.	

Lacrnce, references to, 5.

Laryngitis, eases of, 65, 68, 74.

Larynx, nervous affection of, 55.

Liver, derangement of, affecting other organs, 81-7.

Lungs, prevailing complaints of, easily accounted for, 1.

Measles, cough following, 53.

Mental exhaustion, with simulated consumption, 81.

Mind and body, connection of, 86-7.

Mieroscope, achromatic, value of, 102.

Murray, Sir James, quoted, 19.

Narrative, amusing but suggestive, by a patient, 116-18.

Oil, cod-liver, its real qualities, 75-7.
Orthodoxy of inhalation, Sir Alexander Criehton on, 15-16.
, Dr. Paris on, 13.
, Dr. Carpenter on, 10-11.
, Dr. Coxe, 16-17.
, Dr. Harwood, 19.
, Dr. Wilson, 21.
, Sir Charles Scudamore, 19.
, Sir D. J. Corrigan, 16.
, Sir James Murray, 19.
, Sir John Forbes, 18.
Physician's efforts never to be relaxed, 113.
Prejudices of the profession against new mode of treatment, 20-3.
, Sir Charles Scudamore on, 19.
, Sir A. Criehton on, 16.
Rokitanski, Dr., quoted, 4.
Rullier, Dr., quoted, 12.

Sedatives beneficial when administered by inhalation, 71. Serofula, its frequent identity with consumption, 24. Seudamore, Sir Charles, remarks by, 19. Signs, early, of eonsumption, 50.

——, physical, of eonsumption, 99-102. Special practice, advantages of, 30. Spirometer, 102-3. Stethoscope, importance of, 100.

Rush, Dr., quoted, 17.

124 INDEX.

Swett, Dr., quotation from, 6. Temperature, the proper, for inhaling at, 32. Tonies and stimulants, on the use of, 36-7. Tonsils, ulcerated, case of, 49. Treatment, early, how desirable, 50. Tuberele, its nature, 24.

Uvula, ulceration of, 49.

Voice, loss of, 55, 68, 75. Valleix, Dr., quoted, 4.

Wilson, Dr., remarks by, 21.

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21







